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MINISTRY OF THE INTERIOR, EGYPT.

DEPARTMENT OF PUBLIC HEALTH.

THE PROPERTY OF
THE WELLCOME BUREAU
OF SCIENTIFIC RESEARCH.

ANNUAL REPORT

FOR

1918.



CAIRO.

GOVERNMENT PRESS.

To be obtained, either directly or through any Bookseller, from the GOVERNMENT PUBLICATIONS OFFICE,
Old Ismailia Palace, Sharia Qasr el 'Aini, Cairo.

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ANNUAL REPORT.

INTRODUCTORY NOTE.

Owing to the various restrictive influences existing during the last four or five years, the annual reports of this Administration have been little more than collections of statistical tables embodying the information essential for future reference, and, as a result, they have been perhaps of little interest except to the Public Health expert and the statistician. It is, however, realized that public health is nowadays of such general interest that in the next report (1919) an attempt will be made to give a fuller account of the year's work and to go further into detail.

In order to maintain uniformity for comparative purposes with the reports of the last few years, the present report is drawn up for the calendar year, with the exception of the budgetary, staff, and stores figures ; these refer to the financial year April 1 to March 31.

The strain of war conditions pertaining in 1915, 1916 and 1917 was not only not alleviated, but increased during 1918. The late Director-General of the Administration (Sir David Semple) left the service on April 7, 1918, and Dr. C. Goodman, Assistant Director-General, a most capable official, retired on May 1. Thus the Administration was without either a Director-General or a Deputy Director-General, nor had the depleted staff of the years 1915, 1916 and 1917 received reinforcement.

It was apparent that this state of affairs could not continue, and the Acting Director-General drew up a note for the Adviser of the Ministry of the Interior and the High Commissioner, calling attention to the handicap laid upon the Department by the state of affairs as they then existed. It was explained that in order to keep abreast of the work, continuous effort was necessary by day, and even until late in to the evening, so that it became obvious that if one of the four senior technical officials (the Directors of Sections) fell ill, absolute collapse was imminent.

The epidemic of influenza, which appeared in a mild form in August, assumed a secondary severe wave in October, so the High Commissioner requested from the Commander-in-Chief the services of the former Deputy Director-General of the Department, who, since the beginning of the war, had been re-employed in the Army Medical Service ; he was accordingly recalled to civilian duty with the Administration on November 21, 1918.

In the meantime a Commission had been nominated by the High Commissioner, and approved by the Council of Ministers, to advise as regards the future organization and work of the Department. The Commission was composed as follows :—

President.—Lieut.-Colonel Andrew Balfour, C.B., C.M.G., R.A.M.C.

Members.—Lieut.-Colonel G. E. F. Stammers, R.A.M.C. ; Mr. E. S. Crispin, Director, Medical Department, Sudan Government ; Mr. Charles Todd, O.B.E., Director of Laboratories, Public Health Department.

Secretary.—Mr. H. Sheridan.

Its terms of reference were :—

1. To consider the present organization and duties of the Public Health Department, and its relations with such other Government Departments as are brought closely into touch with Public Health work.

2. To put forward proposals for increasing the efficiency of the Public Health Department, without, however, going into the detailed working of the various Sections or Divisions of the Department, save in so far as this is necessary for a correct appreciation of the subjects under consideration.

3. While the Commission will suggest the nature and number of the posts which in its opinion are necessary for the proper working of the Department, it is not empowered to make any recommendations as regards actual appointments to these posts.

4. It is entitled to call whatever evidence it considers necessary for the purpose of its work, and will be given access to any papers, memoranda, records and reports which it desires to consult.

5. It will submit a report on its findings to His Excellency the Prime Minister.

The Commission held its first meeting on May 29, 1918, sat for more than two months, and went most minutely into the existing condition of affairs, examined witnesses both technical and non-technical, representing every branch of the Service having any bearing on the Public Health—in other words, practically every Administration in the country—collected large masses of statistics, notes, reports, etc., and finally issued a well considered and deeply interesting report embodying a liberal and far-seeing scheme for the future development of public health work in this country; and expressing at the same time an unanimous opinion that the establishment of a Ministry of Health was necessary. The report aroused considerable interest, not only in this country but also in Europe, India, America, and other parts of the world, and it is hoped that in the near future an opportunity will be found to put into concrete form, if not all, at least a considerable portion of the more important proposals and recommendations made by the Commission.

Vital Statistics.—In the report on Section I will be found an explanation of the unusually high death-rate at Ismailia and Sinai (both these areas had been important military centres, involving a large aggregation of military and auxiliary forces), and also a note of the fact that the general birth-rate throughout the country shows a decrease and the death-rate an increase, as has been the experience of other countries during the war.

General Hospitals.—Twenty-one of the Administration's general hospitals were open for the admission of military cases, and from the commencement of the war to the end of the year under consideration 41,364 military patients, including prisoners of war, were admitted for treatment; of these, 20,106 were discharged as fit for duty, 11,429 were discharged to convalescent homes or camps, 1,533 were discharged to England, 6,333 were transferred to other hospitals, and 1,082 deaths occurred.

The total number of days of treatment of military patients was 716,500.

In addition to the above, 5,965 military patients were treated in Egyptian ophthalmic hospitals during the same period.

Maternity Schools, etc.—Five of the schools for native midwives (*dayas*) were kept open, and did most valuable work; these five were Zagazig, Mansûra, Minya, Sohag, and Faiyûm. Owing to the difficulty of finding matrons for Shibîn el Kôm and Damanhûr, the schools there had to be closed till the end of the year.

It is to be hoped that the Maternity Home and Nurses' Training School at Cairo can be re-opened as soon as possible; the need for it is greatly felt in such a large city, and demands are constantly being made for the education of native women in this branch of public health work. Moreover, it is felt that such an establishment will afford an educational centre to combat the appalling infant mortality still prevailing in Egypt. The institution should comprise a lying-in hospital, mothers' and infants' welfare bureau, and school for instruction to Egyptian girls desirous of taking up the calling of nursing.

Ophthalmic Hospitals.—The report on Section III (Ophthalmic Hospitals) is very brief, as a separate report is published on the work of this branch of the Administration.

Influenza.—The report on Section IV gives a history of the very severe influenza epidemic, which, commencing in a mild form in the summer, assumed a malignant character in the autumn. It is computed that altogether over 138,600 people died of the disease up to the end of the year.

The measures taken for combating the disease were the result of very careful and anxious consideration by a committee, the forerunner of a Permanent Consultative Board of Health which it is hoped to establish in the near future.

The action taken was on similar lines to that taken in the past for dealing with other epidemic diseases. The mode of infection and spread of the disease, instructions for avoiding

it, and the measures to be adopted if attacked, as well as advice to those nursing patients, were described in simple language and brought to the notice of the public by means of posters, handbills, circular letters, etc.

A so-called “influenza vaccine” has been largely used in Europe and America both as a prophylactic and curative measure, and the question of its use in Egypt was very carefully considered.

It was agreed that no general application of the vaccine as a prophylactic measure was practicable on any large scale in Egypt, but arrangements were made whereby sufficient quantities of the vaccine were provided for the gratuitous use of poor patients in Government hospitals and in other hospitals where treatment was given free, and for use by medical officers of the Department for this class of patients when treated at home, if medical officers should be desirous of making a trial of it. A considerable supply of the vaccine was also procured and held by the Department for issue against payment to pharmacists and to medical practitioners for use amongst their private patients. Nevertheless, the use of this vaccine was not recommended.

Relapsing Fever.—The case incidence of relapsing fever showed an increase—12,642 cases being recorded, as against 11,162 in 1917; but the mortality-rate fell to 6·6 per cent in 1918, as compared with 9·3 per cent for the preceding year.

Typhus.—The number of cases of typhus fever shows an increase—24,953, as against 18,569 in 1917. The provinces chiefly affected were Gharbîya, Beheira, Minufîya, and Asyût. The mortality-rate was also higher in 1918 than in 1917, the rates per cent being 26·4 and 22·4 respectively.

Plague.—There was a marked fall both in the number of cases of plague and the mortality-rate as compared with the previous year, the figures being 357 cases, with a mortality-rate of 42·8 per cent, in 1918, and 732 cases, with a mortality-rate of 54·5 per cent, in 1917.

Malaria.—The Anti-Malarial Commission instituted in 1917 continued its work, the Government granting a credit of L.E. 22,805 for the purpose. In December this Commission forwarded to the Financial Adviser its preliminary report, which has since been printed in Arabic, English and French and distributed. The report is an interesting document, embodying the result of much work. Part I deals with:—

Malaria in Egypt.

Possible spread of malaria.

Breeding-places of anophelines.

Infiltration water.

Present measures and future developments.

Part II gives a description of the anti-malarial measures actually undertaken in the following specified centres and localities:—

The Suez Canal district.

The Oases of the Western Desert.

Cairo.

Cairo (Gezîra).

Alexandria.

Provincial towns.

Agricultural districts.

The appendices consist of notes on various subjects: “The present state of knowledge with regard to sub-soil water in Egypt”; “Anti-malaria legislation” (suggesting the lines on which this should be drawn up); “Malaria cases reported in the country in 1917, 1916, 1915, 1914, 1913”; “Table showing the percentage of enlarged spleens in the population in different places in Egypt”; and finally a series of valuable and interesting diagrams and charts.

Cholera.—At one time during the year considerable anxiety was felt lest an extensive infection from Palestine should occur, due to the constant coming and going of men of the Egyptian Labour Corps, Camel Corps, etc. Several cases were in fact detected in these men returning to Egypt, but, as a result of the arrangements for detention of suspects, tracing

of passengers, and their subsequent observation, together with the application of the necessary measures of disinfection and control, no case of infection in the interior of the country occurred. Fifteen cases in all were detected and hospitalized, six terminating fatally.

Of the 280,044 men who returned, only 8,579 escaped observation—in other words, 96·9 per cent of these men were medically observed, disinfected, and traced on arrival at their destinations. All cases of diarrhoea were detained at the frontier and subjected to bacteriological examination.

A considerable amount of technical education for disinfectors, village barbers, etc., necessitated by methods now in vogue was carried out. Model cholera camps were established, one at Asyût in Upper Egypt, and another at Tanta in Lower Egypt, and used as centres for the lectures, practical demonstrations, etc.

Smallpox showed a decrease in the number of cases in 1918—1,196 against 1,567 in the previous year. The mortality-rate remained practically the same.

Malta Fever.—Malta fever was kept within bounds, only thirty-three cases occurring during the year. Here, again, the public was instructed by means of handbills and posters as to the method of spread of the disease and the measures for combating it.

Public Health Laboratories.—As pointed out in last year's report, the decentralization of the Army laboratories enabled the military authorities to take over practically the whole of the bacteriological diagnosis work of the Cairo area. This has allowed the Public Health laboratories to considerably extend the civilian diagnoses, more particularly in connection with Epidemic Service in the provinces.

The number of chemical examinations made for the military authorities during the year was 501, as compared with 335 during 1917. The total number of specimens examined in the laboratories during the year was 21,315, as compared with 15,105 in 1917.

Excluding the work done for the Army, the figures show a large increase: 20,649 specimens being examined during the year, as compared with 13,760 specimens during 1917.

Although it has not been possible to develop the Water Service, valuable notes and data on the water supplies and installations throughout the country have been collected, and the public supplies of Cairo submitted to a regular bacteriological control.

Central Medical Commission.—During the year under review the Central Medical Commission was detached from the Administration and attached to the Ministry of Finance. As, with the exception of the Cairo Commission, the whole of the Medical Commission work throughout the country is done by the Medical Officers of this Department, it is perhaps no matter for surprise that before the end of the year it was decided to re-transfer the Cairo Commission to the Public Health Administration.

The Medical Commission work continues to increase, the total number of examinations made amounting in 1918 to 18,546, as against 15,546 in 1917, and 12,960 in 1916.

Inspectorate of Pharmacies.—The number of pharmacists and assistant pharmacists available in the country is still altogether inadequate for the needs, and the enlargement of the Pharmacy School, and an increased output of Egyptian dispensers is urgently called for.

Illicit traffic in narcotic and stimulating drugs is still persisted in, and is excessively difficult to detect. Cases have occurred of well-known and reputable firms in Europe forwarding considerable quantities of cocaine, morphine, etc., by post with sadly insufficient indications of the contents of the parcel. It is almost impossible to detect these cases.

The cocaine habit, it is regretted to record, is apparently on the increase amongst certain classes in Egypt.

The utmost vigilance continues to be exercised over the quality of imported drugs, and the report of the Inspectorate of Pharmacies contains some interesting reading in this respect.

Stores.—The budget for the supply of stores to meet the needs of the Administration continues to increase annually, the item for stores for the Epidemic Section alone showing

an increase of 100 per cent. The equipment for this branch of the work is based on an establishment sufficient for the treatment of 5,700 patients, with an emergency reserve for 1,000 patients in case of epidemics, nor can much hope of any decrease of expenditure in this section be looked for.

We are still suffering under the disability of insufficient storage space.

Scavenging and Watering Service.—Despite the continuance of war conditions and the difficulty of procuring material, 47,844 square metres extension of area was effected in 1918, making up a total area of public roads in charge of the Service for scavenging and watering of 3,224,590 square metres, and involving an increased water consumption of 40,000 cubic metres. By the exercise of the most rigid economy the increased total cost of the service was kept down to something under L.E. 6,000.

Table LXV gives a list of the legal enactments which the Administration is called upon to apply, together with details of the prosecutions instituted under them in 1917 and 1918. The list is a long one, but an examination will disclose several important lacunæ, particularly with reference to food and drink, drainage, and other matters, which it will be the duty of the Public Health Administration to fill up and adjust. In addition, experience has shown that many of the existing laws are defective and need re-drafting and modification. The appointment of a special legal adviser and draftsman for this Department is very much to be desired.

The budget for the financial year April 1, 1918 to March 31, 1919, showed an increase over that for the financial year 1917–1918 of L.E. 70,972. The main items of increase were: salaries, wages, and allowances, L.E. 16,048; food, L.E. 36,912; and stores, L.E. 6,834.

The staff was also increased from 582 pensionable officials and 305 temporary employees in 1917 to 632 and 343 respectively in 1918. The lower grades of staff numbered 1,673 in 1918, as against 1,634 in 1917.

In accordance with the general principle of centralizing in the hands of the State Buildings Department of the Ministry of Public Works all building operations and repairs to Government buildings, the staff and credits hitherto existing in the Department's budget for new buildings, repairs and maintenance of its existing buildings were transferred to the budget of the Ministry of Public Works from the beginning of the present financial year (April 1, 1918). The report on the Engineering Branch, which has hitherto been included in the Departmental Report, is therefore omitted this year, as the details of the building work and repairs will be embodied in the report of the State Buildings Department, and the other work done by the Engineering Branch is incorporated in the reports on the work of the various Sections of the Administration for which it is done. The working arrangement arrived at between this Department and the State Buildings Department is embodied in Departmental Order No. 82, which was published on October 15, 1918.

CATHCART GARNER, Colonel,
Director-General.

1.—REPORT ON SECTION I.

1.—VITAL STATISTICS.

With reference to the statistical information given in Tables I, II and III, it is to be noted that this year the Statistical Department of the Ministry of Finance, which now furnishes these tables, has abandoned the practice which has obtained for some years past of showing separately for Egyptians and foreigners the figures for the estimated population, birth-rate, and death-rate. The reasons given are that the instability of the European population, and the fact that in the case of many Europeans normally resident in Egypt, the births of their children and the deaths of members of their families frequently occur abroad, and are consequently not always recorded in the Egyptian registers, rendered the calculations so unreliable as to be unworthy of placing on record separately.

The high birth-rate at Ismailia, and the extremely high death-rate at Ismailia and in Sinai, are explained by the fact that during the war these areas were both important military centres where a large number of Egyptians engaged in auxiliary services connected with the Army were congregated. The births and deaths which occurred amongst them were registered in the locality, and consequently calculated against the relatively small population based on the census figures. El Arish (Sinai) was also used as the registration centre for all deaths occurring in the Egyptian Labour Corps and Camel Corps in Palestine and Syria.

It will be seen from the tables that in Egypt, as in other countries, as the result of the events of the last year or two, the birth-rate shows a decrease and the death-rate an increase in comparison with the pre-war rates. Table III discloses the very unusual fact, for this country, that the total death-rate for 1918 (39·9 per 1,000) was 0·4 per 1,000 in excess of the total birth-rate (39·5 per 1,000).

TABLE I.—TOTAL POPULATION OF THE TWENTY PRINCIPAL TOWNS.

T O W N .	ESTIMATED UP TO JULY 1.	
	1917	1918
	Total.	Total.
Cairo	753,800	760,000
Alexandria... ..	442,500	445,600
Damietta	31,200	31,700
Tanta	74,200	74,500
Mansûra	49,500	49,500
Damanhûr... ..	40,200	40,600
Zagazig	41,000	41,000
Shibîn el Kôm... ..	24,100	24,500
Gîza	19,000	19,100
Benha... ..	19,000	19,000
Port Said	76,100	77,600
Suez	33,900	34,000
Ismailia	14,000	13,500
Faiyûm	44,200	44,600
Beni Suef	31,900	31,900
Minya... ..	35,000	35,000
Asyût	51,000	51,200
Sohâg	21,900	22,000
Qena	23,000	23,200
Aswân... ..	11,000	11,100
TOTAL	1,836,500	1,849,600

TABLE II.—TOTAL BIRTHS, DEATHS, AND INFANT MORTALITY IN THE TWENTY PRINCIPAL TOWNS.

Towns.	BIRTHS.				DEATHS.				INFANT MORTALITY.		PER CENT OF INFANT MORTALITY.			PROPORTION	
	Egyptians.	Foreigners.	Total.	Per Thousand.	Egyptians.	Foreigners.	Total.	Per Thousand.	From 0-1 Year.	From 1-10 Years.	Deaths under 1 Year.		To Deaths.	From 1-10 Years.	
											To Births.	To Deaths.			
Cairo	27,599	448	28,047	36.9	37,669	779	38,448	50.7	8,853	10,569	31.6	23.0	27.5		
Alexandria	15,144	1,194	16,338	36.7	18,135	1,228	19,363	43.5	4,244	5,681	26.0	21.9	29.3		
Damietta	1,199	1	1,200	37.9	1,143	3	1,146	36.2	234	309	19.5	20.4	27.0		
Port Said	2,530	120	2,650	34.1	3,531	312	3,843	49.5	546	833	20.6	14.2	21.7		
Suez	1,103	45	1,148	33.8	1,187	58	1,245	36.6	309	292	26.9	24.8	23.5		
Ismailia... ..	1,143	45	1,188	88.0*	8,396	30	8,426	624.1*	246	331	20.7	12.9	3.9		
Benha	528	5	533	28.1	622	3	625	32.9	121	175	22.7	19.4	28.0		
Zagazig... ..	1,474	10	1,484	36.2	2,185	8	2,193	53.5	387	461	26.1	17.6	21.0		
Tanta	2,719	18	2,737	36.7	3,352	9	3,361	45.1	624	1,103	22.8	18.6	32.8		
Mansûra	1,767	43	1,810	36.6	1,765	23	1,788	36.1	349	453	19.3	19.5	25.3		
Shibîn el Kôm	1,006	3	1,009	41.2	897	4	901	36.8	174	174	17.2	19.3	19.3		
Damanhûr	1,993	2	1,995	49.1	1,824	2	1,826	45.0	452	532	22.7	24.8	29.1		
Gîza	850	—	850	44.5	1,276	—	1,276	66.8	355	484	41.8	27.8	37.9		
Faiyûm... ..	2,117	3	2,120	47.5	2,263	5	2,268	50.9	614	646	29.0	27.1	28.5		
Beni Suef	1,304	1	1,305	40.9	1,333	4	1,337	41.9	331	414	25.4	24.8	31.0		
Minya	1,512	4	1,516	43.3	1,841	8	1,849	52.8	474	599	31.3	25.6	32.4		
Asyût	2,106	3	2,109	41.2	2,698	4	2,702	52.8	705	879	33.4	26.1	32.5		
Sohâg	999	1	1,000	45.5	1,170	1	1,171	53.2	295	377	29.5	25.2	32.2		
Qena	1,096	—	1,096	47.2	1,510	—	1,510	65.1	429	395	39.1	28.4	26.2		
Aswân	439	1	440	39.6	529	5	534	48.1	138	105	31.4	25.8	19.7		
TOTAL	68,628	1,947	70,575	38.2	93,326	2,486	95,812	51.8	19,880	24,812	28.2	20.7	25.9		

* The high birth-rate and death-rate are due to the influx, owing to the presence of the Army, of a large temporary civilian population whose births and deaths are registered in the locality and calculated against the normal civilian population thereof.

TABLE III.—ANNUAL GENERAL RETURN OF BIRTHS AND DEATHS REGISTERED.*

GOVERNORATES AND PROVINCES.	POPULATION.	BIRTHS.				DEATHS.			
	Calculated July 1, 1918.	Egyptians.	Foreigners.	TOTAL.		Egyptians.	Foreigners.	TOTAL.	
	Egyptians and Foreigners.			Absolute Figures.	Per Thousand.			Absolute Figures.	Per Thousand.
<i>Governorates.</i>									
Cairo	760,000	27,599	448	28,047	36·9	37,669	779	38,448	50·6
Alexandria...	445,600	15,144	1,194	16,338	36·7	18,135	1,228	19,363	43·5
Damietta	31,700	1,199	1	1,200	37·9	1,143	3	1,146	36·2
Port Said	77,600	2,530	120	2,650	34·1	3,531	312	3,843	49·5
Suez	34,000	1,103	45	1,148	33·8 †	1,187	58	1,245	36·6 †
Ismailia	13,500	1,143	45	1,188	88·0	8,396	30	8,426	624·1
<i>Provinces.</i>									
Eastern Desert...	17,500	65	—	65	3·7	169	—	169	9·7
Oases	32,700	1,403	—	1,403	42·9	2,644	—	2,644	80·9 †
Sinai	5,400	276	—	276	51·1	4,295	—	4,295	795·4
Western Desert...	8,600	679	—	679	79·0	559	—	559	65·0
Qalyûbiya	519,500	19,922	5	19,927	38·4	22,503	8	22,511	43·3
Sharqîya	956,200	33,127	14	33,141	34·7	41,042	28	41,070	42·9
Daqahliya	990,200	40,169	47	40,216	40·6	41,391	31	41,422	41·8
Beheira	900,200	33,460	5	33,465	37·2	29,312	4	29,316	32·6
Gharbîya	1,666,900	69,303	41	69,344	41·6	67,224	28	67,252	40·3
Minûfiya	1,083,200	42,368	3	42,371	39·1	42,863	5	42,868	39·6
Gîza	563,200	23,539	3	23,542	41·8	22,839	2	22,841	40·6
Beni Suef	460,400	19,397	3	19,400	42·1	12,423	4	12,427	27·0
Faiyûm	517,100	22,201	3	22,204	42·9	21,671	5	21,676	41·9
Minya... ..	774,400	32,294	8	32,302	41·7	26,270	8	26,278	33·9
Asyût	991,100	44,484	2	44,486	44·9	36,219	4	36,223	36·5
Girga	874,300	35,481	1	35,482	40·6	32,760	1	32,761	37·5
Qena	843,500	29,881	3	29,884	35·4	27,659	—	27,659	32·8
Aswân... ..	254,100	7,994	3	7,997	31·5	6,592	5	6,597	26·0
TOTAL	12,820,900	504,761	1,994	506,755	39·5	508,496	2,543	511,039	39·9
Preceding Year...	12,662,700	511,433	2,289	513,722	40·6	374,064	2,084	376,148	29·7

* Excluding 40 monthly village returns which have not yet been received.

† High birth-rate and death-rate due to the influx, owing to the presence of the Army, of a large temporary civilian population whose births and deaths are registered in the locality and calculated against the normal civilian population thereof.

2.—UNHEALTHY, INCONVENIENT, AND DANGEROUS ESTABLISHMENTS.

The following table gives details of the applications for licences for establishments, falling under Class 1 of the Law of August 1904 (public and cattle markets included), which were dealt with in 1918:—

TABLE IV.—APPLICATIONS RECEIVED AND ACTION TAKEN.

NATURE OF ESTABLISHMENT.	Approved.	Refused.	Under Consideration.	Applications given up.	TOTAL.
Soap factories	12	1	4	4	21
Tanneries	10	—	1	—	11
Carbide of calcium depot	—	—	1	—	1
Establishment for ravelling wool rags... ..	—	—	1	—	1
Potteries	—	—	1	1	2
Chemical Manure Depot... ..	1	—	—	—	1
Establishment for grinding peels and seeds	1	—	—	—	1
Establishment for ironing clothes with a mechanical motor... ..	2	—	—	—	2
Beer-bottling establishments	6	—	1	—	7
Brewery	1	—	—	—	1
Tobacco-chopping factory	1	—	—	—	1
Tobacco and cigarette factory	1	—	—	—	1
Starch factory... ..	1	—	—	—	1
Sweetmeat factories... ..	3	1	2	—	6
Rice-husking mills	21	—	9	1	31
Rice-husking and corn-grinding establishments	3	—	2	1	6
Establishment for husking rice, grinding corn and extracting oil	1	—	—	—	1
Sugar-cane crushing factories	4	—	2	—	6
Sugar-cane crushing factories and cornmills	2	—	—	—	2
Butter and milk factories	3	—	2	3	8
Macaroni factory	1	—	—	—	1
Macaroni factory and cornmill	1	—	—	—	1
Cotton-ginning factories	6	—	6	2	14
Establishment for cleaning skerto cotton ...	—	—	1	—	1
Plaster and <i>homra</i> mills	2	—	—	—	2
Kneading establishment with a mechanical motor	—	—	—	1	1
Rope factories	—	2	—	—	2
Aerated water factories	7	2	5	2	16
Oil mills	2	—	2	—	4
Ice factories	2	—	—	—	2
Ice factory and cold storage establishment	1	—	—	—	1
Fish <i>halaqas</i>	2	—	1	—	3
Public baths	—	—	4	—	4
Sweetmeat factory and oil mill	1	—	—	—	1
Glue factory	1	—	—	—	1
Distilleries of alcoholic liquors	1	—	1	—	2
Distillery of flowers and perfumes	—	—	1	—	1
Match factories... ..	1	—	—	3	4
Dye shop with a mechanical motor	—	—	1	—	1
Public and cattle markets	8	4	6	—	18
Food markets	1	—	—	2	3
TOTAL	110	10	54	20	194

Ministerial "Arrêtés."—The draft *Arrêtés* laying down additional conditions for establishments possessing permits under the Law of August 28, 1904 (*Etablissements Insalubres*) were dealt with in 1918 as follows:—

TABLE V.—MINISTERIAL "ARRÊTÉS."

NATURE OF ESTABLISHMENT.	Approved.	Refused.	Under Consideration	TOTAL.
<i>Alexandria :—</i>				
Public stables	10	—	1	11
Cattle sheds	3	—	—	3
Public bakeries	12	—	1	13
Butchers' shops	6	—	1	7
Grocery establishments	5	—	1	6
Public cookshops	2	—	—	2
Establishment for roasting and frying food articles ...	3	—	—	3
Establishment for the sale of fresh fish	3	—	—	3
Oil selling shops	2	—	—	2
Milk establishments	2	—	—	2
Booza establishments	1	—	—	1
Simple distillery	1	—	—	1
Tannery	1	—	—	1
Establishment for ironing clothes	1	—	—	1
Establishment for the sale of domestic fowls	1	—	—	1
Simple blacksmith's shop	1	—	—	1
Public baths	5	—	—	5
<i>Cairo :—</i>				
Aerated water factories	9	—	—	9
Cattle shed	1	—	—	1
Public bakery	1	—	—	1
Beer bottling establishment	1	—	—	1
Bone and rag store	—	—	1	1
<i>Damietta :—</i>				
Sweetmeat factory	—	—	1	1
Tannery	—	—	1	1
Public bath	1	—	—	1
Oil mill	—	1	—	1
Rice-husking mill... ..	—	—	1	1
<i>Gharbîya Province :—</i>				
Public baths	1	1	—	2
Aerated water factories	3	—	—	3
Public bakery	1	—	—	1
Public stable... ..	1	—	—	1
Dye shop	1	—	—	1
<i>Sharqîya Province :—</i>				
Skin stores	—	2	—	2
Oil mill	1	—	—	1
Public bath	1	—	—	1
<i>Beni Suef Province :—</i>				
Tanneries	6	—	—	6
<i>Minya Province :—</i>				
Public stable	1	—	—	1
<i>Gîza Province :—</i>				
Public bakery	—	—	1	1
Pig sty	1	—	—	1
<i>Daqahliya Province :—</i>				
Oil mill	1	—	—	1
<i>Faiyûm Province :—</i>				
Cotton-ginning factory	—	1	—	1
<i>Minûfiya Province :—</i>				
Bean-cooking establishment	—	—	1	1
<i>Qalyûbiya Province :—</i>				
Bakeries... ..	—	—	2	2
<i>Asyût Province :—</i>				
Lime-kiln	—	1	—	1
TOTAL	90	6	12	108

3.—MEDICO-LEGAL EXAMINATIONS AND REPORTS.

There is a considerable diminution in the figures this year compared with 1917, when the gross totals amounted to 13,427 accidental and 41,920 criminal cases. The difference, however, is accounted for in the categories of cases classified as "slight."

TABLE VI.—MEDICO-LEGAL REPORTS DRAWN UP.

LOCALITY.	SLIGHT		SERIOUS.		FATAL.		TOTAL.	
	Accident.	Criminal.	Accident.	Criminal.	Accident.	Criminal.	Accident.	Criminal.
<i>Governorates :—</i>								
Cairo	338	3,592	55	77	207	93	600	3,762
Alexandria	1,033	2,424	259	106	821	77	1,713	2,607
Canal } Port Said ...	153	538	4	1	42	2	199	541
} Ismailia ...	18	139	15	9	25	1	58	149
Suez (including Quseir)	21	84	25	13	9	2	55	99
Damietta	20	145	8	3	17	3	45	151
LOWER EGYPT.								
Beheira	320	1,382	86	106	348	68	754	1,556
Gharbiya	435	2,997	272	155	372	114	1,079	3,266
Minûfiya	256	1,883	181	110	228	57	665	2,050
Daqahliya	469	1,710	132	79	249	33	850	1,822
Sharqiya.	243	1,179	155	95	304	30	702	1,304
Qalyûbiya	177	1,190	141	67	161	22	479	1,279
UPPER EGYPT.								
Giza... ..	145	1,177	91	84	269	30	445	1,291
Faiyûm	108	993	104	102	67	44	279	1,139
Beni Suef	276	747	59	122	60	48	395	917
Minya	215	1,731	123	149	170	119	508	1,999
Asyût	302	2,970	155	209	276	113	733	3,292
Girga	226	1,603	88	134	168	60	482	1,797
Qena	104	1,414	116	155	223	72	443	1,641
Aswân	48	392	37	39	85	10	170	441
TOTAL	4,907	28,290	2,106	1,815	3,641	998	10,654	31,103

4.—CEMETERIES AND PRIVATE TOMBS.

(a) CEMETERIES.

The work carried out is as follows :—

TABLE VII.—WORK DONE IN CONNEXION WITH CEMETERIES DURING 1918.

PROVINCE OR GOVERNORATE.	CEMETERIES.			OLD CEMETERIES.		
	Established.	Enlarged.	Roads for Cemeteries.	Authorized.	Portion condemned.	Condemned.
Gharbiya Province	—	—	—	14	—	—
Beheira "	—	—	—	1	—	1
Sharqiya "	2	—	1	3	—	—
Daqahliya "	1	—	—	1	—	1
Qalyûbiya "	1	—	1	—	—	—
Giza "	—	—	—	1	—	—
Asyût "	—	1	—	—	—	—
Girga "	1	—	—	—	—	—
Qena "	1	—	—	3	—	—
Damietta Governorate	—	—	—	1	—	—
Suez "	—	1	—	—	—	—
Port-Said "	—	—	—	1	—	—
TOTAL	6	2	2	25	—	2

TABLE VIII.—LEGAL ACTIONS BROUGHT BY THE CONTENTIEUX AGAINST ENCROACHERS ON CEMETERY LANDS DURING 1918.

PROVINCE.	Judgment in Government's Favour.	Judgment against Government.	Cases filed.
Gharbîya Province	1	—	1
Minûfiya „	2	—	1
Daqahlîya „	1	—	5
Sharqîya „	5	—	18
Qalyûbiya „	1	—	—
Giza „	1	—	—
Beheira „	—	—	2
Faiyûm „	1	—	5
Asyût „	—	—	2
Qena... „	—	—	1
Minya „	1	—	—
Girga „	—	—	1
TOTAL	13	—	36

(b) PRIVATE TOMBS.

The Department accorded seven special authorizations for burial in private tombs situated outside cemeteries, as follows :—

Gharbîya Province	1	Daqahlîya Province	1
Beheira „	1	Beni Suef „	1
Sharqîya „	1	Minya „	2

5.—“ BIRKAS.”

TABLE IX.—LIST OF GOVERNMENT “ BIRKAS ” FILLED IN DURING 1918.

MUDÎRÎYA.	Number of <i>Birkas</i> filled in.	TOTAL AREA.			
		Feddâns.	Qirâts.	Sahms.	Sq. Metres.
Beheira	3	1	19	18	7,656
Gharbîya	1	—	10	—	1,750
Daqahlîya	1	—	4	16	817
Sharqîya	3	1	5	16	5,192
Qalyûbiya	3	1	15	—	6,825
Giza	2	—	16	1	2,807
Faiyûm	1	—	15	19·5	2,768
Beni Suef	3	—	21	12	3,762
Minya... ..	6	2	6	2	9,465
Asyût	3	1	15	19	6,964
Girga	2	—	12	2·7	2,120
TOTAL... ..	28	11	22	10·2	50,126

6.—MOSQUES.

TABLE X.—MOSQUES DEALT WITH IN 1918.

DESCRIPTION.	Cairo Governorate.	Provinces.	Total.
Ablutionary systems of private mosques newly constructed and opened for use	—	9	9
Ablutionary systems of Waqfs mosques repaired and opened for use	7	10	17
Ablutionary systems of old private mosques requiring repairs :—			
Number opened for use after repair... ..	—	68	68
„ closed for want of repair	—	149	149
„ under repair	—	95	95

7.—PROTECTION OF DRINKING WATER.

An *Arrêté* for preventing the pollution of drinking water at Rosetta was promulgated during the year.

8.—SLAUGHTER-HOUSES AND SLAUGHTERING SITES.

No new slaughter-houses were established in the country during 1918.

Slaughtering Sites.—Sites for slaughtering animals intended for food in villages where no slaughter-houses exist were approved in the following four villages :—

Matarîya, Daqahlîya Province ; Ibshâq, Beni Mazâr Markaz, Minya Province ; Sidûd, Minûf Markaz, Minûfiya Province ; Abu Sîr, Samannûd Markaz, Gharbîya Province.

9.—“ DÉPOTOIRS.”

A *dépotoir* at Suez was approved by the Department during 1918.

10.—PROSTITUTION.

The towns in which the regulations regarding *maisons de tolérance* were operative are shown in the table below, together with certain information regarding the medical examination of prostitutes and the diseases from which they were found to be suffering.

The number of prostitutes registered last year (6,523), and the total number of examinations made (185,140), shows very little difference as compared with the 1918 figures, but this year there was a large increase in the amount of gonorrhœa found as compared with last year (5,599 cases, as against 3,583). The number of prostitutes treated in Government hospitals in 1917 (5,625) and the cases of gonorrhœa were very much fewer than in 1918.

TABLE XI.—PROSTITUTION IN 1918.

PLACE.	Number of Prostitutes.	Number of Examinations.	SICK OF		
			Syphilis.	Gonorrhœa.	Other Diseases.
Cairo { Natives	1,573	29,247	232	3,472	87
Alexandria... .. { Europeans	440	17,275	25	357	12
Port Said { Natives	1,855	56,409	146	663	286
Ismailia { Europeans	166	7,285	1	19	138
Suez	37	1,660	—	3	4
Damietta	94	3,040	—	46	25
Beheira :—	75	3,737	1	77	55
Damanhûr	3	158	—	1	—
Shubra Khît	121	3,628	38	66	—
Gharbîya :—	8	426	—	—	1
Tanta	283	9,110	108	122	23
Kafr el Sheikh	40	1,170	7	5	6
Disûq	23	650	2	—	—
Mahalla el Kubra... ..	59	1,633	2	9	—
Kafr el Zaiyât	60	1,310	3	9	29
Minûfiya :—					
Shibîn el Kôm	32	562	4	4	2
Minûf	7	59	—	2	—
Sharqîya :—					
Zagazig	145	7,220	48	77	25
Bilbeis	17	836	17	28	—
Ibrahimîa	66	2,442	13	22	5
Daqahlîya :—					
Mansûra	186	3,790	25	168	5
Mit Ghamr	90	1,227	10	16	—
Simbillâwein	13	507	2	3	—
Qalyûbîya :—					
Benha	50	2,600	21	29	6
Gîza :—					
Gîza	28	566	—	—	—
Imbâba	22	572	2	9	2
Faiyûm :—					
Faiyûm	68	1,534	12	60	37
Beni Suef :—					
I'eni Suef	95	1,979	16	39	1
Minya :—					
Minya	177	6,369	126	60	13
Beni Mazâr	71	875	11	4	—
Asyût :—					
Asyût	106	3,029	42	24	5
Mallawi	28	833	8	3	—
Rôda	18	619	—	—	—
Manfalût	7	298	—	1	1
Abu Tig	45	1,244	—	11	—
Girga :—					
Tahta	17	98	—	5	—
Sohâg	59	3,372	15	28	2
Akhmîm... ..	11	537	—	6	4
Girga	61	1,527	9	23	—
Balyana	23	449	6	—	—
Carried forward... ..	6,279	179,882	952	5,471	774

TABLE XI.—PROSTITUTION IN 1918 (*continued*).

PLACE.	Number of Prostitutes.	Number of Examinations.	SICK OF		
			Syphilis.	Gonorrhœa.	Other Diseases.
<i>Brought forward...</i>	6,279	179,882	952	5,471	774
<i>Qena Mudiriya :—</i>					
Isna...	48	918	4	17	4
Luxor ...	53	1,311	9	7	3
Qûs ...	19	656	—	—	—
Dishna ...	11	444	1	4	2
Nag ^c Hammâdi ...	29	963	7	14	4
Farshût ...	27	702	15	12	—
Qena ...	66	1,871	16	66	5
<i>Aswân Mudiriya :—</i>					
Aswân ...	9	435	1	8	7
TOTAL...	6,541	187,182	1,005	5,599	799

TABLE XII.—NUMBER OF PROSTITUTES TREATED IN GOVERNMENT HOSPITALS DURING 1918.

HOSPITAL.	Number of Prostitutes.	DISEASES.		
		Syphilis.	Gonorrhœa.	Other Diseases.
Alexandria... { Lock Hospital for Natives ...	817	202	304	311
{ Lock Hospital for Europeans...	642	31	342	269
Suez ...	133	1	77	55
Port Said ...	61	5	42	14
Damietta ...	—	—	—	—
Tanta ...	342	148	166	28
Damanhûr ...	114	41	73	—
Mansûra... ..	198	25	168	5
Zagazig ...	150	48	77	25
Shibîn el Kôm ...	10	4	4	2
Benha ...	56	21	29	6
Cairo ... { Hôd el Marsûd Lock Hospital for Natives...	4,924	414	4,418	92
{ Lock Hospital for Europeans ...	394	25	357	12
Fever Hospital ...	56	—	—	56
Beni Suef ...	56	16	39	1
Faiyûm ...	50	12	30	8
Minya ...	199	126	60	13
Asyût ...	106	73	28	5
Sohâg ...	115	66	47	2
Qena ...	148	40	100	8
Isna... ..	32	6	22	4
Aswân ...	16	1	8	7
TOTAL ...	8,619	1,305	6,391	923

II.—REPORT ON SECTION II.

1.—GENERAL HOSPITALS.

HOSPITALIZATION FOR MILITARY PATIENTS.

During the year 1918 Suez hospital was retained for the treatment of military cases, while the old hospital continued to be used for native cases.

The other general hospitals admitted cases sporadically as they were required; for the most part these cases were natives, usually Army contractors' workmen, though Port Said hospital continued the arrangement with the French Military and Naval Authorities for the admission of sick and wounded.

In March 1918 the Director Medical Services, on the suggestion of this Administration, asked that a camp should be erected to serve as a hospital for the discharged Egyptian Labour Corps men. This camp was immediately equipped and erected at Zagazig with tents to accommodate 200 beds. Later (in November) this number was increased to 350 beds. The entire cost and running expenses are to be borne on the military suspense account of the Ministry of Finance.

During the nine months' work the camp has admitted and treated 2,464 cases, with 408 deaths. This rather large death-rate is due to the debilitated condition of the men on admission, many dying on the way or the day after their arrival.

The total number of military cases treated in the Egyptian Government hospitals for the year 1918 was 8,532, while the total number treated since the outbreak of hostilities was 41,364.

As was predicted in the report for 1917, the charge to the Military Authorities of P.T. 17·5 per diem for treatment of men in hospital had to be raised to P.T. 25 owing to the increased price of food and drugs.

GENERAL STATISTICS AND NOTES.

The number of beds is 4,543, compared with 3,872 in 1917—an increase of 671 beds. This is due to the beds at Zagazig, Egyptian Labour Corps camp, and to the large increase in the number of in-patients treated in general hospitals during this year.

A marked rise in the number of voluntary cases treated is shown: 1917, 28,222; 1918, 38,612.

The number of days of treatment for 1918 was 1,117,791, as compared with 871,228 in 1917, an increase of 246,563.

The number of out-patients treated this year has increased by 5,508.

The average death-rate for all in-patients (military and civilian) was 6·946 per cent in 1918 and 5·709 per cent in 1917. This high death-rate is due to the number of cases sent to the Egyptian Labour Corps camp who died on day of arrival or shortly afterwards, and owing to the influenza epidemic.

The electric generating plant at Benha hospital, provided for by local subscription, was fitted with an *x*-ray apparatus.

The inhabitants of Minya subscribed L.E. 400 for *x*-ray plant and electric lighting for the hospital. The necessary engine and dynamo were purchased.

The Provincial Council of Minûfiya has notified its desire to provide an *x*-ray plant and also a venereal clinique for the hospital at Shibîn el Kôm; the Administration fully appreciated this goodwill on the part of the Council, and it is hoped that the necessary installation will be made without delay.

It is very satisfactory to note that this year Second Medical Officers were appointed to Minya, Shibîn el Kôm, Beni Suef, and Faiyûm hospitals, and that next year will see

Second Medical Officers working at all the hospitals except the small hospitals of Aswân, Isna, Qalyûb, and Damietta. Also a matron and nursing sister have been appointed to Tanta Hospital, and it is hoped that in 1919 similar posts will be filled at Mansûra and Beni Suef. There is no doubt that with this extra medical assistance and improved nursing control the comfort and welfare of the patients will be considerably increased, and it is hoped that more time will be available for the study and report upon diseases peculiar to Egypt on the part of Medical Officers in charge of hospitals.

NEW WORKS AND REPAIRS.

A new arrangement has been instituted this year whereby all new works and repairs are carried out by the Ministry of Public Works. Formerly the Engineering Section of this Department was responsible and carried out the necessary work, and it has been the custom to give a short *résumé* in this report. The Ministry of Public Works will now include this work in the report of the State Buildings Department.

It should be noted that amongst the new works most desired for the provincial hospitals are venereal clinics with accommodation for the isolation of prostitutes, infectious blocks for the treatment of infectious diseases, and suitable out-patient buildings to meet the expected large increase of this class of patients. Moreover, should the policy of providing matrons for these hospitals in annually increasing numbers be approved, necessary quarters will have to be provided.

COST OF MAINTENANCE.

The cost of upkeep of hospitals for 1918 was L.E. 164,218·433 milliemes, as against L.E. 114,591·683 milliemes in 1917, an increase of L.E. 51,626·750 milliemes. This increase is due to the present high prices of drugs, dressings, food, etc., and is certain to be further increased to meet post-war conditions.

The cost of upkeep does not include the expenses of the Central Administration, nor does it include repairs and renewals of buildings.

The cost per bed per annum in 1918 was L.E. 36·588 milliemes, as against L.E. 29·595 milliemes in 1917.

The cost per patient-day was 149 milliemes in 1918, 131 milliemes in 1917, 130 milliemes in 1916, 134 milliemes in 1915.

It is satisfactory to note that the receipts for 1918 amounted to L.E. 23,277·650 milliemes, as against L.E. 21,305·857 milliemes in 1917, an increase of L.E. 1,971·793 milliemes.

The usual statistical tables are appended :—

TABLE XIII.—COMPARATIVE GENERAL STATISTICS.

	1917.	1918.	Increase or Decrease.
Number of hospitals	23	24*	+ 1
„ beds	3,872	4,543	+ 671
„ in-patients treated	56,289	75,002	+ 18,713
Of which voluntary patients... ..	28,222	38,612	+ 10,390
Death-rate for in-patients	5·709 per cent.	† 6·946 per cent.	+ 1·237 per cent.
Number of days of treatment	871,228	1,117,791	+ 246,563
„ new out-patients	209,909	215,417	+ 5,508
„ out-patients' visits	471,742	436,035	— 35,707
Major operations	11,399	8,500	— 2,899
	L.E. M.	L.E. M.	L.E. M.
Cost of upkeep	114,591 683	166,218 433	+ 51,626 750
Receipts	21,305 857	23,277 650	+ 1,971 793

* Hôd el Marsûd Lock Hospital was separated from Qasr el Aini Hospital.

† This high death-rate is due to the cases sent to the Egyptian Labour Corps Camp who died on day of arrival or shortly afterwards.

TABLE XIV.—PATIENTS AND COST.

HOSPITAL.	Number of Beds.	Number of In Patients.	Number of Days of Treatment.	Number of New Out-Patients.	Number of Out-Patients' Visits.	Number of Operations.	Cost of Upkeep for 1918.		Cost per Bed per annum.		Cost per Patient-day.
							L.E.	M.	L.E.	M.	
Alexandria... ..	356	10,713	126,977	18,771	53,225	1,443	22,071	476	61	999	173
Suez	560	6,039	70,167	7,544	9,984	268	13,158	796	23	498	187
Port Said	150	4,138	46,127	19,863	31,237	316	8,730	188	58	201	189
Port Said (Inf.)...	36	3,043	35,706	—	—	—	3,269	750	90	826	091
Damietta	52	1,222	15,923	7,419	16,838	247	2,218	793	42	669	139
Tanta	113	2,052	34,143	5,093	15,386	343	5,478	514	48	482	160
Tanta (Inf.) ...	18	779	6,580	—	—	—	658	630	36	590	100
Damanhûr	69	1,730	19,021	3,484	6,979	436	2,989	079	43	320	157
Mansûra	124	2,258	42,475	5,506	10,118	385	4,768	163	38	452	112
Zagazig	130	2,270	41,029	4,373	7,907	495	4,876	558	37	512	184
Shibîn el Kôm ...	74	1,687	25,644	3,555	8,744	341	2,939	670	39	725	114
Benha... ..	76	1,732	25,656	3,253	3,341	261	3,284	439	43	216	128
Qalyûb	34	991	10,795	5,680	11,266	322	1,966	457	57	837	182
Qasr el 'Aini ...	612	11,160	173,857	96,436	178,878	1,475	38,165	201	62	361	219
Hôd el Marsûd...	300	5,147	120,280	304	5,957	—	5,737	055	19	123	47
Fever Hospital ...	900	6,782	112,447	—	—	—	16,264	013	18	071	145
Beni Suef	62	1,009	18,661	4,956	10,751	247	2,528	736	40	786	135
Faiyûm	64	1,544	17,642	5,215	10,235	147	2,930	502	45	789	166
Minya... ..	94	1,864	22,783	4,378	16,358	302	3,533	231	37	588	155
Asyût	180	2,877	47,969	5,851	7,730	730	5,390	756	29	948	112
Sohâg	56	1,203	17,403	2,754	5,962	185	2,528	646	45	154	145
Qena	59	1,164	19,845	3,840	7,549	280	3,056	000	51	796	154
Isna	31	625	10,128	3,024	7,995	151	1,716	519	55	371	170
Aswân	43	509	10,043	4,118	9,595	126	2,057	527	47	849	204
TOTAL ...	4,193	72,538	1,071,301	215,417	436,035	8,500	160,318	699	38	235	149
Zagazig E.L.C.	350	2,464	46,490	—	—	—	5,899	734	16	856	127
GRAND TOTAL ...	4,543	75,002	1,117,791	215,417	436,035	8,500	166,218	433	36	588	149

TABLE XV.—IN-PATIENTS (VOLUNTARY, MILITARY, AND POLICE).

HOSPITAL.	Voluntary Cases.	Police Cases.	Military Cases.	Total Number of Cases.	Total Number of Days of Treatment.
Alexandria	7,138	2,281	988	10,407	126,977
Suez	205	1,807	3,858	5,870	70,167
Port Said	2,937	491	588	4,016	46,127
Port Said (Inf.) ...	2,821	—	221	3,042	35,706
Damietta	974	204	—	1,178	15,923
Tanta	600	1,368	3	1,971	34,143
Tanta (Inf.)	559	216	—	775	6,580
Damanhûr	1,117	565	—	1,682	19,021
Mansûra	1,182	991	—	2,173	42,475
Zagazig	633	1,509	56	2,198	41,029
Shibîn el Kôm ...	354	1,280	—	1,634	25,644
Benha	695	985	—	1,680	25,656
Qalyûb	748	213	—	961	10,795
Qasr el 'Aini ...	7,551	3,119	88	10,758	173,857
Hôd el Marsûd ...	—	4,924	—	4,924	120,280
Fever 'Abbasia ...	5,782	782	159	6,723	112,447
Beni Suef	512	462	—	974	18,661
Faiyûm	307	1,199	—	1,506	17,642
Minya	794	1,011	1	1,806	22,783
Asyût	1,856	823	90	2,769	47,969
Sohâg	529	624	5	1,158	17,403
Qena	616	509	3	1,128	19,845
Isna	468	138	—	606	10,128
Aswân	234	239	8	481	10,043
TOTAL	38,612	25,740	6,068	70,420	1,071,301
Zagazig E.L.C. ...	—	—	2,464	2,464	46,490
GRAND TOTAL	38,612	25,740	8,532	72,884	1,117,791

TABLE XVI.—ADMISSIONS AND DISCHARGES.

HOSPITAL.	ADMITTED.			DISCHARGED.			
	Existing.	Admitted.	Total.	Cured.	Died.	Improved.	Remaining
Alexandria	306	10,407	10,713	5,352	971	4,039	351
Suez	169	5,870	6,039	3,790	148	1,943	158
Port Said	122	4,016	4,138	2,548	199	1,273	118
Port Said (Infectious)	1	3,042	3,043	2,714	329	—	—
Damietta	44	1,178	1,222	975	56	163	28
Tanta	81	1,971	2,052	1,741	90	162	59
Tanta (Infectious)	4	775	779	669	83	26	1
Damanhûr	48	1,682	1,730	1,279	95	324	32
Mansûra	85	2,173	2,258	1,352	125	705	76
Zagazig	72	2,198	2,270	1,715	125	374	56
Shibîn el Kôm	53	1,634	1,687	1,400	81	169	37
Benha	52	1,680	1,732	1,337	61	269	65
Qalyûb	30	961	991	156	44	762	29
Qasr el 'Aini	402	10,758	11,160	3,970	1,140	5,620	430
Hôd el Marsûd	223	4,924	5,147	—	—	4,842	305
Fever Abbassia	59	6,723	6,782	5,923	771	34	54
Beni Suef	35	974	1,009	666	75	238	30
Faiyûm	38	1,506	1,544	1,055	60	385	44
Minya	58	1,806	1,864	1,399	68	321	76
Asyût	108	2,769	2,877	2,041	152	584	100
Sohâg	45	1,158	1,203	847	54	263	39
Qena	36	1,128	1,164	968	28	125	43
Isna	19	606	625	284	22	301	18
Aswân	28	481	509	335	25	135	14
TOTAL	2,118	70,420	72,538	42,516	4,802	23,057	2,163
Zagazig E.L.C.	—	2,464	2,464	1,069	408	691	296
GRAND TOTAL	2,118	72,884	75,002	43,585	5,210	23,748	2,459

TABLE XVII.—OUT-PATIENTS' DIVISION.

HOSPITAL.	Number of Patients.	Number of Attendances.	HOSPITAL.	Number of Patients.	Number of Attendances.
			<i>Brought forward</i> ...	78,861	163,759
Alexandria	18,771	53,225	Qalyûb... ..	5,680	11,266
Suez	7,544	9,984	Qasr el 'Aini	96,436	178,878
Port Said	19,863	31,237	Hôd el Marsûd	304	5,957
Port Said (Inf.)	—	—	Fever Abbassia... ..	—	—
Damietta	7,419	16,838	Beni Suef	4,956	10,751
Tanta	5,093	15,386	Faiyûm	5,215	10,235
Tanta (Inf.)... ..	—	—	Minya	4,378	16,358
Damanhûr	3,484	6,979	Asyût	5,851	7,730
Mansûra	5,506	10,118	Sohâg	2,754	5,962
Zagazig	4,373	7,907	Qena	3,840	7,549
Shibîn el Kôm	3,555	8,744	Isna	3,024	7,995
Benha	3,253	3,341	Aswân	4,118	9,595
<i>Carried forward</i> ...	78,861	163,759	TOTAL ...	215,417	436,035

TABLE XVIII.—HOSPITAL RECEIPTS.

HOSPITAL.	RECEIPTS.		HOSPITAL.	RECEIPTS.	
	L.E.	M.		L.E.	M.
			<i>Brought forward</i> ...	18,778	244
Alexandria... ..	1,813	962	Qalyûb	91	561
Suez	10,083	206	Qasr el 'Aini	275	565
Port Said	3,732	263	Hôd el Marsûd	—	—
Port Said (Inf.)	—	—	Fever Abbassia... ..	1,738	500
Damietta	162	189	Beni Suef	218	319
Tanta	453	864	Faiyûm	204	422
Tanta (Inf.)	—	—	Minya... ..	366	217
Damanhûr	431	430	Asyût	697	195
Mansûra	593	499	Sohâg	188	992
Zagazig	574	226	Qena	168	830
Shibîn el Kôm	385	870	Isna	334	129
Benha	547	735	Aswân	215	676
<i>Carried forward</i> ...	18,778	244	TOTAL ...	23,277	650

TABLE XIX.—

SECTION.	Alexandria.	Suez.	Port Said.	Port Said. (Infectious).	Damietta.	Tanta.	Tanta (Infectious).	Damanhūr.	Mansūra.	Zagazig.	Shibin el Kôm
<i>Medical :—</i>											
Alimentary :—											
Diseases of stomach ...	148	110	101	—	23	20	2	2	—	5	57
Tuber. peritonitis ...	7	—	1	—	1	4	—	—	—	—	—
Dysentery ...	143	157	68	—	22	46	—	110	23	29	8
Diarrhœa and enteritis ...	258	325	107	70	9	54	—	66	23	13	5
Liver ...	30	25	1	6	2	—	—	3	—	—	1
Other diseases ...	140	22	10	—	—	7	10	—	—	—	—
Respiratory :—											
Pneumonia ...	88	100	131	43	20	29	—	5	8	10	10
Phthisis ...	125	43	48	11	7	6	—	—	9	6	1
Pleurisy ...	27	35	8	—	9	8	—	2	2	—	3
Other diseases ...	600	136	134	70	28	44	—	22	24	32	21
Circulatory :—											
Heart ...	95	53	16	—	18	12	—	2	9	3	1
Other diseases ...	27	2	4	—	—	—	—	—	—	5	—
Urinary :—											
Nephritis ...	173	30	22	10	13	28	—	28	10	7	20
Other diseases ...	64	42	27	—	2	15	—	9	2	26	16
Blood :—											
Spleen ...	43	1	—	—	—	19	—	3	9	—	12
Other diseases ...	85	10	1	—	38	—	—	11	—	—	6
Nervous :—											
Brain ...	24	2	6	9	—	2	—	2	—	—	—
Spinal cord ...	20	3	—	—	2	3	—	—	—	—	—
Other diseases ...	68	45	10	—	2	6	—	15	—	4	—
Constitutional :—											
Rheumatism ...	128	83	109	1	12	8	—	3	23	13	15
Diabetes ...	18	—	3	—	1	—	—	2	2	1	1
Senility ...	93	8	13	11	2	6	—	—	1	1	—
Debility ...	115	82	86	—	4	17	—	9	22	20	11
Parasitic :—											
Malaria ...	99	301	37	—	51	16	25	8	12	11	72
Ankylostomiasis ...	21	8	1	—	54	8	—	27	31	36	—
Filaria ...	—	—	—	—	1	—	—	—	—	—	—
Pellagra ...	132	7	2	—	94	40	—	16	78	15	3
Poisoning :—											
Alcohol ...	180	3	—	—	1	107	—	—	—	—	—
Other poisons ...	28	7	1	—	—	17	—	6	7	3	11
Lunatics ...	164	16	44	—	1	31	—	12	21	10	21
Other medical diseases ...	2,879	2,604	1,505	2,812	250	108	737	400	481	791	615
<i>Surgical :—</i>											
Fractures :—											
Simple ...	302	38	57	—	16	72	—	22	28	55	28
Compound ...	82	12	24	—	21	43	—	23	27	20	26
Tumours :—											
Malignant ...	36	4	—	—	8	4	—	1	—	3	1
Non-malignant ...	30	1	23	—	—	1	—	2	1	19	16
Traumatic injuries ...	730	156	—	—	41	357	—	145	180	315	206
Burns ...	147	25	39	—	14	24	—	23	19	15	12
Bilharziasis ...	157	4	20	—	38	54	—	2	163	28	20
Fistula in ano ...	61	13	15	—	26	34	—	51	36	15	20
Liver abscess ...	7	—	4	—	1	2	—	4	1	3	—
Hernia ...	234	23	47	—	26	29	—	41	103	60	43
Hæmorrhoids ...	200	42	43	—	12	18	—	55	35	38	43
Appendicitis ...	9	25	1	—	2	—	—	—	2	3	2
Vesical calculus ...	25	2	3	—	13	25	—	32	29	19	6
Other surgical diseases ...	1,018	801	937	—	181	280	—	369	426	315	230
<i>Ophthalmic</i> ...	486	41	94	—	27	—	—	—	7	5	4
<i>Skin Diseases</i> ...	407	126	52	—	20	41	5	9	35	47	31
<i>Venereal :—</i>											
Syphilis ...	200	131	98	—	50	199	—	71	163	154	45
Gonorrhœa ...	112	319	83	—	9	171	—	86	193	87	2
<i>Midwifery</i> ...	37	2	9	—	3	14	—	2	12	7	12
<i>Gynecological diseases</i> ...	90	10	24	—	24	14	—	22	—	17	6
<i>Relatives accompanying patients</i> ...	321	4	69	—	23	9	—	7	1	4	24
TOTAL ...	10,713	6,039	4,138	3,043	1,222	2,052	779	1,730	2,258	2,270	1,687

RETURN OF SICK, 1917.

Benha.	Qalyûb.	Qasr el 'Aini.	Hôd el Marsûd.	Fever Abbassia.	Beni Suef.	Faiyûm.	Minya.	Asyût.	Sohâg.	Qena.	Isna.	Aswân.	TOTAL.	Zagazig E.L.C. Camp.	GRAND TOTAL.
16	14	57	—	—	—	7	2	43	16	19	2	9	653	—	653
1	—	23	—	—	—	—	2	2	4	1	1	1	48	—	48
39	12	177	—	—	7	13	12	24	6	21	7	22	946	8	954
23	5	105	—	—	12	19	7	28	8	19	5	5	1,166	199	1,365
3	14	148	—	—	—	2	6	11	16	5	3	1	277	—	277
—	3	72	—	—	—	13	41	2	2	2	7	15	346	—	346
10	13	113	—	37	9	20	10	33	2	—	4	3	698	—	698
6	8	290	—	—	3	2	9	17	4	13	6	3	617	21	638
5	—	45	—	—	—	1	3	2	—	—	1	—	151	—	151
27	31	347	—	—	6	22	47	55	36	21	18	8	1,729	69	1,798
17	8	272	—	—	8	4	4	39	16	4	8	5	594	13	607
—	—	17	—	—	3	3	—	3	—	1	—	1	66	—	66
21	21	95	—	—	13	11	3	10	—	33	2	2	552	69	621
15	—	58	—	—	30	14	18	8	2	4	4	20	376	—	376
21	7	36	—	—	—	2	—	4	2	2	2	—	163	4	167
—	49	91	—	—	—	1	2	2	4	—	—	4	304	—	304
—	4	82	—	—	—	3	1	2	1	—	—	—	138	—	138
—	2	34	—	—	—	1	1	2	—	—	2	—	70	—	70
—	—	86	—	—	4	1	15	35	11	10	1	2	315	7	322
12	8	48	—	—	3	16	13	16	7	12	3	7	540	13	553
—	—	21	—	—	6	1	4	12	3	2	2	2	81	—	81
6	—	97	—	—	—	2	1	3	11	—	6	1	262	4	266
16	20	55	—	—	—	12	23	11	26	14	1	4	548	1,296	1,844
20	17	53	—	87	13	52	37	54	5	5	2	11	988	—	988
18	88	86	—	—	4	4	61	28	96	139	91	—	801	79	880
—	—	12	—	—	—	—	—	66	1	—	—	—	80	—	80
70	69	128	—	—	5	2	12	—	1	7	—	4	685	9	694
22	1	225	—	—	38	50	15	—	9	—	6	5	662	—	662
12	5	90	—	—	4	7	11	5	10	7	—	6	237	—	237
19	—	53	—	—	14	15	16	22	14	11	—	10	494	35	529
346	17	1,763	—	6,658	72	473	421	750	67	112	13	13	23,887	58	23,945
36	4	324	—	—	11	34	33	72	69	35	6	23	1,265	17	1,282
18	15	290	—	—	16	31	20	39	34	9	13	17	780	—	780
2	10	97	—	—	12	4	4	—	7	6	9	2	210	—	210
8	7	37	—	—	39	8	2	41	8	10	10	—	263	—	263
213	92	623	—	—	106	153	194	275	209	132	24	15	4,166	6	4,172
22	12	221	—	—	13	10	12	32	7	17	4	23	691	—	691
89	20	111	—	—	56	22	60	33	3	17	24	1	922	—	922
26	14	86	—	—	22	6	22	23	14	16	5	2	507	—	507
—	—	10	—	—	4	—	—	4	1	1	1	—	43	—	43
58	17	269	—	—	50	24	40	93	25	12	8	6	1,208	—	1,208
17	18	132	—	—	17	23	27	42	12	14	10	8	806	—	806
1	11	26	—	—	1	—	—	3	2	4	2	—	94	—	94
9	18	80	—	—	17	9	21	9	3	13	3	5	341	—	341
237	296	1,718	—	—	157	187	230	470	188	118	69	145	8,372	16	8,388
63	12	1,258	—	—	—	—	50	—	2	41	133	57	2,280	541	2,821
42	—	230	103	—	22	21	42	88	15	—	7	6	1,349	—	1,349
75	2	303	434	—	82	145	184	236	140	127	49	6	2,894	—	2,894
35	—	42	4,610	—	87	68	76	58	57	108	33	15	6,251	—	6,251
15	6	90	—	—	—	9	8	19	8	—	1	2	256	—	256
3	19	434	—	—	10	4	16	12	12	10	5	1	733	—	733
18	2	—	—	—	33	13	26	39	7	10	12	11	633	—	633
1,732	991	11,160	5,147	6,782	1,009	1,544	1,864	2,877	1,203	1,164	625	509	72,538	2,464	75,002

TABLE XX.—ANALYSIS OF MILITARY CASES, 1918.

HOSPITAL.	Number of Military Patients admitted (including Prisoners of War).	Number of Military Cases discharged Fit for Duty (or, if Prisoners of War, to Prisoners of War Camp).	Number of Military Cases discharged to Convalescent Homes or Camps.	Number of Military Cases discharged to England.	Number of Military Cases transferred to other Hospitals.	Number of Military Cases which died.	Number of Patient-Days for Military Patients (including Prisoners of War.)
Alexandria	988	—	957	—	—	31	14,328
Suez	3,858	2,595	351	34	831	47	45,754
Port Said	588	545	10	—	10	23	6,462
Port Said (Infect.)...	221	—	129	—	45	47	2,015
Tanta	3	2	1	—	—	—	83
Zagazig	56	51	—	—	—	1	960
E.L.C. Camp	2,464	1,760	—	—	—	408	46,490
Qasr el Aini	88	81	—	—	—	4	742
Fever Abbassia ...	159	—	—	—	147	12	3,922
Minya	1	—	—	—	—	1	38
Asyût	90	87	—	—	—	3	1,598
Sohâg	5	4	—	—	—	1	50
Qena	3	3	—	—	—	—	24
Aswân	8	8	—	—	—	—	91
Total for 1918 ...	8,532	5,136	1,448	34	1,033	578	122,557
Total for 1917 ...	4,548	2,931	57	28	1,433	108	67,058
Total for 1916 ...	12,897	7,142	2,155	199	2,977	170	212,238
Total for 1915 ...	14,851	4,459	7,769	1,262	816	212	306,540
Total for 1914 ...	536	438	—	10	74	14	8,107
Total from commence- ment of War to end of 1918 ...	41,364	20,106	11,429	1,533	6,333	1,082	716,500

TABLE XXI.—MILITARY CASES TREATED HOSPITAL BY HOSPITAL FROM COMMENCEMENT OF WAR TO END OF 1918.

HOSPITAL.	Number of Military Patients admitted (including Prisoners of War).	Number of Military Cases discharged Fit for Duty (or, if Prisoners of War, to Prisoners of War Camp).	Number of Military Cases discharged to Convalescent Homes or Camps.	Number of Military Cases discharged to England.	Number of Military Cases transferred to other Hospitals.	Number of Military Cases which died.	Number of Patient-days for Military Patients (including Prisoners of War.)
Alexandria	4,066	1,057	2,099	528	168	172	100,596
Suez	12,309	6,877	1,447	389	3,236	123	156,843
Port Said	4,212	2,545	1,082	120	206	136	79,122
Port Said (In.) ...	511	239	129	—	64	64	6,651
Tanta	1,338	860	265	128	83	2	29,875
Damanhûr	1,025	612	151	75	143	5	23,406
Mansûra	699	484	129	47	39	—	17,357
Zagazig	1,876	1,309	151	148	208	19	39,307
Shibîn el Kôm ...	423	254	105	30	18	—	11,186
Benha	1,199	916	141	38	77	3	22,612
Mersa Matrûh ...	60	59	—	—	—	1	797
Qasr el 'Aini ...	5,482	292	5,147	30	33	60	91,581
Fever Abbassia ...	521	210	—	—	261	50	11,714
Beni Suef	395	279	14	—	101	1	7,191
Faiyûm	1,161	629	118	—	360	6	16,476
Minya	1,182	366	428	—	376	12	14,866
Asyût	1,750	954	—	—	740	16	30,654
Sohâg	479	282	3	—	158	4	6,282
Qena	85	22	—	—	54	—	1,613
Isna	90	77	13	—	—	—	1,159
Aswân	37	23	7	—	8	—	722
Total	38,900	18,346	11,429	1,533	6,333	674	670,010
E. L. C. Zagazig Camp	2,464	1,760	—	—	—	408	46,490
Grand Total	41,364	20,106	11,429	1,533	6,333	1,082	716,500

TABLE XXII.—COMPARATIVE ANNUAL STATISTICS.

YEAR.	Number of Beds.	Number of In-Patients.	Number of Days of Treatment.	Number of New Out-Patients.	Number of Out-Patients' Visits.	Total Cost of Maintenance.		Cost per Bed per Annum.		Cost per Patient- day.
						L.E.	M.	L.E.	M.	
1908	2,263	31,802	556,543	—	—	—	—	—	—	—
1909	2,491	34,221	598,539	144,509	353,409	—	—	—	—	—
1910	2,385	35,065	579,796	152,733	312,152	—	—	—	—	—
1911	2,385	37,018	621,350	173,401	385,062	—	—	—	—	—
1912	2,346	38,887	614,921	192,227	424,707	77,992	867	33	245	127
1913	2,409	42,794	627,813	207,882	417,845	83,698	539	34	744	133
1914	2,485	44,914	681,680	179,338	346,673	92,189	050	37	098	135
1915	3,320	50,483	858,878	152,329	340,774	114,843	117	34	591	134
1916	3,825	55,489	946,557	178,788	392,961	123,379	860	32	256	130
1917	3,872	56,289	871,228	209,909	471,742	114,591	683	29	595	131
1918	4,543	75,002	1,117,791	215,417	436,035	166,218	433	36	588	149

2.—GOVERNMENT DISPENSARIES.

The following tables show the numbers of patients treated gratuitously at Government dispensaries in 1918, and also the sums collected in respect of those cases for which a charge was made :—

TABLE XXIII.—OUT-PATIENTS TREATED GRATUITOUSLY IN GOVERNMENT DISPENSARIES DURING 1918.

DISPENSARIES.	Number of Patients.	DISPENSARIES.	Number of Patients.
		<i>Brought forward...</i>	21,327
Rosetta	794	Beni Mazâr	3,627
El 'Atf	1,661	Samalût	1,457
Ityâi el Bârûd	1,382	Abu Qurqâs	1,279
El Dilingât... ..	1,296	Wasta... ..	1,157
Shubra Khît	2,997	Dairût... ..	645
Baltim (Burullus)	366	Manfalût	883
Barrage	473	Abnûb... ..	667
Fariskûr	88	Abu Tîg	469
Tel el Kebîr	225	El Badâri	42
Kafr el Sheikh	280	Tema	879
Fuwa	415	Akhmîm	1,086
Abu Hummus	5,352	Girga	1,086
El Santa	362	Balyana	934
Quweisna	927	Basyûn	27
Shibîn el Qanâtir	1,536	Nag ^c Hammâdi... ..	512
Matarîa (Manzala)	285	Dishna	28
Kafr el Dauwâr	59	Qûs	213
El Saff	807	Quseir... ..	1,740
Biba	1,399	Idfu	26
Itsa	623	El Dirr	117
<i>Carried forward</i>	21,327	TOTAL... ..	38,201

TABLE XXIV.—DISPENSARY RECEIPTS.

DISPENSARIES.	RECEIPTS.		DISPENSARIES.	RECEIPTS.	
	L.E.	M.		L.E.	M.
			<i>Brought forward</i> ...	383	306
Rosetta	21	692	Samalût	18	404
El 'Atf	7	147	Abu Qurqâs	12	370
Ityâi el Barûd	6	910	Wasta	22	109
El Dilingât	28	707	Dairût... ..	9	576
Shubra Khît	16	948	Manfalût	11	792
Baltim (Burullus)	13	483	Abnûb... ..	14	730
Barrage	12	892	Abu Tig	19	188
Fariskûr	9	715	El Badâri	20	881
Tel el Kebîr	28	177	Tema	19	830
Kafr el Sheikh	8	630	Akhmîm	17	660
Fûwa	36	312	Girga	18	885
Abu Hummus	8	15	Balyana	16	351
El Santa	18	365	Bassiûn	21	845
Quweisna	17	950	Nag ^s Hammâdi... ..	17	678
Shibîn el Qanâtir	15	022	Dishna	22	997
Matarîa (Manzala)	28	505	Qûs	9	179
Kafr el Dauwâr	9	676	Quseir... ..	2	494
El Saff	27	940	Idfu	15	115
Biba	21	312	El Dirr	5	484
Itsa	16	100	Safâga... ..	0	922
Beni Mazâr	29	638			
<i>Carried forward</i> ...	383	306	<i>TOTAL</i>	680	796

3.—CHILDREN'S DISPENSARIES.

The twelve Provincial Council dispensaries inspected by the Department have worked during the full year with good attendances.

BUILDINGS.

Port Said.—The dispensary has been housed in a private house, the military still utilizing the dispensary building as a native boys' school.

Gîza.—Efforts were made to secure a more sanitary building in a more open position, and many were inspected, but no suitable and available house for the work could be found.

Asyût.—The dispensary moved in May into the new building, which has been specially built with accommodation for a maternity school as well. It is well situated on the edge of the town, and, being designed for the work, is a great improvement on the hired building previously occupied.

STAFF.

Two matrons have resigned and their places have been filled. Great difficulty has been experienced in finding suitable nurses at short notice to replace matrons during sickness and for short leave. The appointment of some nurses attached to headquarters of the Public Health Administration, who will be available for duty in the provinces when required, will be of the greatest assistance for the continuity of the work.

BUDGETS.

In spite of the higher cost of material there has been very little increase in the budgets for the year.

DRUGS.

The drugs ordered from abroad through the Department of Public Health and due in April did not arrive, so small quantities were bought locally to keep the work going till the supplies, which were estimated as the quantity needed for a year, should arrive.

DOCTOR'S VISITS.

At Zagazig, Port Said, Minya and Asyût private practitioners have kindly given their services, but at the other dispensaries serious cases are sent to Government hospitals for advice and treatment.

ATTENDANCES.

These were slightly less than the preceding year ; this is accounted for by the influenza epidemic, when mothers were unable to bring their children. Statistics are attached.

There is no change in the class of cases attending.

TABLE XXV.—PATIENTS AND ATTENDANCES.

DISPENSARY.	New Cases.	Old Cases.	Total Attendances.	Period.
Tanta*	7,337	28,721	36,058	296 days
Zagazig	2,388	12,460	14,848	287 „
Mansûra	7,577	20,253	27,830	286 „
Shibîn el Kôm	4,561	24,007	28,568	287 „
Port Said	6,172	22,326	28,498	291 „
Damanhûr	9,296	24,176	33,472	291 „
Gîza	5,353	48,580	53,933	292 „
Beni Suef	4,302	26,312	30,614	294 „
Wasta	3,273	16,991	20,264	292 „
Biba	3,511	21,919	25,430	293 „
Minya	6,280	19,437	25,717	285 „
Asyût	5,611	30,528	36,139	288 „
Faiyûm	4,400	16,478	20,878	277 „
Total	70,061	312,188	382,249	Average. 289 days.
Total in 1914 ...	47,601	202,088	249,689	—
Total in 1915 ...	48,923	206,159	255,082	—
Total in 1916 ...	70,223	320,587	390,810	293 days.
Total in 1917 ...	69,233	314,474	383,707	295 days.
Total in 1918 ...	70,061	312,188	382,249	289 days.
Increase or decrease ...	+ 828	— 2,286	— 1,458	— 6 days.

* Tanta Dispensary has not been under the inspection of this Department.

TABLE XXVI.—CLASSIFICATION OF CASES.

CASES.	Tanta.*	Zagazig.	Mansûra.	Shibîn el Kôm.	Port Said.	Damanhûr.	Giza.	Beni Suef.	Wasta.	Biba.	Minya.	Asyût.	Faiyûm.
Eyes	—	460	172	732	1,668	6	606	68	557	917	1,423	1,232	81
Skin	973	371	1,147	1,045	443	1,285	792	987	551	492	675	925	551
Chest	888	258	982	481	493	745	1,362	836	467	349	336	773	649
Abdomen... ..	3,802	858	2,198	1,769	2,991	6,146	1,887	2,076	1,529	1,560	1,776	1,690	1,429
Surgical	305	172	321	187	190	69	246	115	93	44	—	116	69
General	1,343	245	2,719	293	214	960	296	175	65	142	2,062	611	1,553
Infectious ...	26	24	38	54	173	85	162	45	11	7	8	264	68
Total number of new cases	7,337	2,388	7,577	4,561	6,172	9,296	5,353	4,302	3,273	3,511	6,280	5,611	4,400
Number of old cases	28,721	12,460	20,253	24,007	22,326	24,176	48,580	26,312	16,991	21,919	19,437	30,528	16,478
TOTAL... ..	36,058	14,848	27,830	28,568	28,498	33,472	53,933	30,614	20,264	25,430	25,717	36,139	20,878
Number of working days	296	287	286	287	291	291	292	294	292	293	285	288	277

TABLE XXVII.—COST PER PATIENT DURING THE YEARS 1916 AND 1917.

	1916.	1917.
Tanta	L.E. 460,685 37,993 = P.T. 1·2	L.E. 437,839 38,758 = P.T. 1·2
Zagazig	L.E. 646,968 14,350 = P.T. 4·5	L.E. 722,941 20,515 = P.T. 3·5
Mansûra	L.E. 595,000 27,327 = P.T. 2·2	L.E. 540,712 19,078 = P.T. 2·8
Shibîn el Kôm	L.E. 547,622 36,012 = P.T. 1·5	L.E. 539,011 33,533 = P.T. 1·6
Port Said	L.E. 540,000 50,176 = P.T. 1·1	L.E. 507,904 39,527 = P.T. 1·3
Giza	L.E. 499,440 28,235 = P.T. 1·8	L.E. 616,444 42,800 = P.T. 1·4
Beni Suef	L.E. 591,782 31,467 = P.T. 1·9	L.E. 650,869 31,400 = P.T. 2·1
Wasta... ..	L.E. 335,804 23,478 = P.T. 1·4	L.E. 343,387 22,631 = P.T. 1·5
Biba	L.E. 335,804 21,217 = P.T. 1·6	L.E. 343,387 26,661 = P.T. 1·3
Minya... ..	L.E. 738,282 27,268 = P.T. 2·7	L.E. 726,818 28,788 = P.T. 2·5
Asyût	L.E. 667,463 69,776 = P.T. 1·0	L.E. 733,464 45,954 = P.T. 1·6
Faiyûm	L.E. 835,286 23,511 = P.T. 3·6	L.E. 557,853 21,407 = P.T. 2·6
Damanhûr	—	L.E. 469,119 12,855 = P.T. 3·6

* Tanta Dispensary has not been under the inspection of this Department.

4.—MATERNITY SCHOOLS.

Five of the schools for native midwives (*dayas*) were working during the year—Zagazig, Mansûra, Minya, Sôhag, and Faiyûm ; owing to the difficulty in finding suitable matrons, those at Shibîn el Kôm and Damanhûr were closed until the end of the year. The new school at Damanhûr was opened in November, and work is progressing satisfactorily.

The school at Tanta, which is not at present under the inspection of the Public Health Administration, has been closed since June 1917.

BUILDINGS READY FOR OPENING.

Maternity centres exist at present at Asyût and Beni Suef, but the Provincial Councils in these towns are unable to find funds to start the work. There is no change in the housing of the schools.

STAFF.

Three matrons were engaged in England, and commenced work in the autumn. Owing to the difficulty of finding nurses the schools have had to be closed during the leave or sickness of the matrons in charge, with the result that interruption and even cessation of this most useful work occurred.

DOCTOR'S VISITS.

As in past years, invaluable help has been given by the Principal Medical Officers and Assistant Doctors of the hospitals and Markazes. Private practitioners frequently give their help in cases of emergency. Courses of lectures to the *dayas*, to supplement those given by the matrons, are of great assistance, and instruction at the school in infectious diseases and examination of the dead obviates the necessity of the pupils attending the course given by the *mumarrida* at the Government hospital in these subjects, and is of great benefit to those who already hold the certificates, but who are in need of "refresher" courses.

Encouraging reports continue to come in from Markaz doctors, who have the opportunity of seeing the trained women at work in the districts, and they speak most favourably of the improvement.

ATTENDANCES.

The difficulty in getting cases for teaching purposes is gradually being overcome, from 20 to 70 cases a month being attended by the matron and pupils. Though there is still an obstructive element among the town *dayas*, the majority work well with the school, seek the help of the matron in difficult cases, and are gradually learning to recognize when to call in help. The patients themselves also appreciate the benefits of the modern methods, and many applications are made to the matrons without the intervention of a *daya*. There are many calls from better-class patients willing to pay a fee, but as the work among the poor is as much as one matron can attend to, and the school accepts no money from the patients, these have to be referred to the hospital *mumarrida* or a trained town *daya*.

Though the maternity centres are not equipped as hospitals, and are essentially for extern work, 35 women have applied for admission and been treated in the emergency bed provided at each school.

The visits of the matrons and *dayas* to the patients in their own homes numbered 25,355, and, owing to the freedom of access to the peoples' houses, centres of infectious diseases are frequently recognized in the early stages, thus lessening the danger of extended outbreaks or epidemics, saving the lives of the neighbours, and obviating much expense to the Treasury.

PUPILS.

The standard of pupils continues to be as good as it can be expected to obtain from uneducated *fellahîn*. Town *dayas*, who are inspected when possible, are advised to send their daughters, or whatever relative is likely to succeed to their practice, to school, as the standard of candidates cannot be raised until those who enter have had at least some

preliminary training. With this in view, several women have been assisted with clothing, etc., needed to enable their daughters to attend the Provincial Council schools.

A considerable number of more educated women from Cairo, Alexandria, and Port Said apply for training as midwives, but as there is no central training centre no help can be given them. Through the courtesy of the Provincial Councils a very few have been allowed to take the four months' course at the Provincial Councils schools. This class of midwife is needed to fill the post of staff *daya* in the schools and work among the people who can pay a moderate fee, and would be pupils at the women's hospital and maternity in Cairo, were one established.

The need for inspection after training becomes more urgent yearly, as the number granted certificates increases, and great benefit is anticipated from the appointment of travelling nurses.

The number of pupils trained during the year was 116, as compared with 147 in 1917 and 130 in 1916, while 3 entered but failed to pass the examination.

MEDICAL.

The number of cases attended during 1918 was 1,845; of these, 156 were abnormal. The epidemic of influenza at the end of the year was the cause of many cases of pneumonia and premature confinements among the patients. As many cases also occurred among the various staffs, great difficulty was experienced in carrying on the work.

It is hoped that the need for a central maternity hospital with general training school for *dayas* and nurses in Cairo has become so apparent, and the advantages to the population so obvious, that the disinclination on the part of the Financial Authority to provide funds for the installation of such an institution will be removed.

TABLE XXVIII.—NUMBER OF “ DAYAS ” WHO PASSED EXAMINATION AND THOSE WHO FAILED IN 1918.

	Passed.	Failed.	Total.
Zagazig	24	—	24
Mansûra	19	2	21
Faiyûm	24	—	24
Minya	31	1	32
Sohâg	18	—	18
TOTAL	116	3	119

Number of Egyptian midwives who attended midwifery course in the maternity homes	119
Number of those who passed the examination	116
„ „ failed	3

TABLE XXIX.—CASES.

CASES.	Zagazig.	Mansûra	Shibîn.	Damanhûr.	Faiyûm.	Minya.	Sohâg.	Total.
Abortions	9	12	1	1	14	22	20	79
Deliveries	442	295	97	78	354	222	111	1,599
B.B.A.... ..	8	19	3	15	30	47	45	167
Primipara	86	86	18	10	116	36	38	390
Abnormal or complicated... ..	9	35	1	4	57	27	23	156
Premature births	23	9	2	4	20	20	8	86
Still-born	17	9	2	1	16	20	5	70
Deaths } Mother	1	2	—	1	5	3	2	14
Deaths } Child... ..	13	3	1	2	13	9	9	50
In-patients... ..	8	5	2	—	10	8	6	39
Total number of cases	459	326	101	94	398	291	176	1,845
Number of visits of matrons and <i>dayas</i>	5,888	6,107	1,351	870	3,474	4,706	2,959	25,355
Number of working days...	256	161	69	60	244	237	204	Average 176
Number of <i>dayas</i> trained...	24	19	—	—	24	31	18	116

TABLE XXX.—ANALYSIS OF ABNORMAL CASES.

CASES.	Zagazig.	Mansûra.	Minya.	Sohâg.	Faiyûm.	Shibîn el Kôm.	Damanhor.	TOTAL.
<i>Multiple Births :—</i>								
Twins	3	11	3	4	2	1	—	24
<i>Abnormal Presentations :—</i>								
Breach ordinary	4	—	—	—	—	—	1	8
„ difficult	—	2	4	—	2	—	—	8
Footling	3	1	—	—	—	—	—	4
Face	—	2	2	—	3	—	—	7
Transverse	1	3	3	1	4	—	—	12
Cord	1	—	1	—	—	—	—	2
Brow	—	—	1	—	1	—	—	2
Unreduced O.P.	—	—	—	—	2	—	—	2
<i>Instrumental Deliveries :—</i>								
Forceps	—	6	7	1	9	—	—	23
Craniotomy	—	—	—	2	—	—	—	2
Decapitation	1	—	—	—	—	—	—	1
<i>Complications :—</i>								
Post-partum hæmorrhage	2	—	7	—	8	—	1	18
Ante-partum „	1	5	2	1	2	—	—	11
Placenta previa	—	4	—	—	3	—	—	7
Adherent placenta	2	2	3	—	1	—	—	8
Uterine inertia	1	—	—	—	6	—	—	7
Contracted pelvis	2	—	3	—	2	—	—	7
Prolapse of uterus	—	1	—	1	—	—	—	2
„ vaginal wall	—	—	—	—	4	—	—	4
Rupture of uterus... ..	—	—	—	—	1	—	—	1
Laceration of perinæum	—	—	—	—	1	—	—	1
Hydramnios	—	—	1	—	—	—	—	1
Eclampsia	1	—	—	—	—	—	—	1
Impacted shoulders	—	—	—	—	2	—	—	2
Hydatiform mole	—	—	1	—	—	—	—	1
Talipes	1	—	—	—	1	—	—	2
Ascitis in infant	1	—	—	—	—	—	—	1
Anencephalic monster	—	—	—	—	1	—	—	1
Hydrocephaly	—	—	—	—	1	—	—	1
Cleft palate and harelip	—	—	1	—	—	—	—	1
<i>Premature Births :—</i>								
Viable	23	9	20	8	19	2	4	85
Non-viable	9	12	22	20	14	1	1	79
<i>Illnesses complicating Puerperium :—</i>								
Fever undiagnosed	—	1	1	—	1	—	—	3
Puerperal fever	—	4	—	—	1	1	—	6
Spanish fever	1	—	—	6	1	—	1	9
Typhus „	—	—	—	5	—	—	—	5
Relapsing fever	—	—	—	—	1	—	—	1
General œdema	—	—	1	—	1	—	—	2
Heart disease	—	—	—	—	1	—	—	1
Pneumonia	—	—	1	—	2	—	—	3
Malaria	—	—	—	—	2	—	—	2
Mania	—	—	1	—	—	1	—	2
Typhoid fever	—	—	—	—	1	—	—	1
Phthisis	—	—	1	—	—	—	—	1
<i>Maternal Deaths :—</i>								
Spanish fever	1	—	—	2	—	—	1	4
Undiagnosed fever	—	1	1	—	—	—	—	2
Ante-partum hæmorrhage	—	—	2	—	—	—	—	2
Placenta previa	—	1	—	—	—	—	—	1
Rupture of uterus	—	—	—	—	1	—	—	1
Pneumonia	—	—	—	—	2	—	—	2
Typhoid fever	—	—	—	—	1	—	—	1
<i>Infant Mortality :—</i>								
Born dead	14	6	18	4	11	2	1	56
Died after delivery	15	3	9	9	10	1	2	49
TOTAL	87	74	116	63	125	9	15	489

III.—REPORT ON SECTION III.

OPHTHALMIC HOSPITALS.

These hospitals, forming the subject of a separate annual report, the outlines only of the work done by them will be given here.

Permanent Hospitals.—During the last ten years ten of the fourteen provinces of Egypt have been supplied with a well-designed and well-built ophthalmic hospital, each of which was built and equipped at the expense* of the province concerned and is maintained by the Government at a pre-war cost of L.E. 1,500 per annum inclusive. Also a permanent hospital is in course of construction at Benha at the expense of Qalyûbiya Province, and is expected to be opened and maintained by the Government in 1920. In addition, the Provincial Council of the large province of Gharbiya has provided and now maintains ophthalmic dispensaries in specially designed buildings at three of the larger towns.

Hospitals under Canvas.—Stationary hospitals under canvas are maintained by the Government† at Aswân and Gîza, the first of which was originally provided by Sir Ernest Cassel, and the latter was provided by the Provincial Council of Gîza Province. One Cassel Fund travelling hospital is maintained by the Government, and two smaller travelling hospitals are maintained by the Provincial Councils of Daqahliya and Asyût.

Statistics.—The number of new patients treated at the various hospitals in 1918 was 82,316. The total number of attendances of out-patients was 1,013,282. The average number of visits of each patient was 12·20. The number of operations performed was 54,277. The number of in-patients was 3,264, to whom 66,442 diets were issued.

School Inspection and Treatment.—The school ophthalmic clinics at eleven of the Government provincial primary schools have been carried on during the year 1917–1918 satisfactorily.

TABLE XXXI.—SOURCES OF PROVISION AND MAINTENANCE OF HOSPITALS.

	PROVIDED BY	MAINTAINED BY	DATE.
<i>Permanent :—</i>			
Tanta	Government grant	Government grant	1908
Asyût	Public subscription and Government grant	" "	1911
Mansûra	Gift by Badrawi Pasha	" "	1912
Beni Suef	Public subscription	" "	1912
Zagazig	Provincial Council	" "	1913
Mahalla el Kûbra	" "	Provincial Council	1913
Kafr el Zaiyât	" "	" "	1913
Damanhûr	" "	Government grant	1914
Shibîn ef Kôm	Public subscription	" "	1914
Sohâg	" "	" "	1914
Minya	Provincial Council	" "	1915
Santa	" "	Provincial Council	1915
Faiyûm	" "	Government grant	1916
<i>Travelling :—</i>			
No. 1 Camp	Sir Ernest Cassel	Cassel Fund	1904
" 2 "	" "	" "	1905
Asyût	Provincial Council	Provincial Council	1912
Daqahliya	" "	" "	1913
No. 3 Camp	" "	Government grant	1918

* Except Tanta, which was built entirely at the expense of the Government, and Asyût, which was built at a cost of L.E. 12,000, of which L.E. 5,000 was subscribed locally and the remainder provided by the Government.

† Two tent hospitals were provided in 1903 and 1904 by Sir Ernest Cassel and are maintained from the interest of the sum of L.E. 40,000 given by him for the purpose.

TABLE XXXII.—SYNOPSIS ON WORK OF HOSPITALS SINCE 1904.

		*1904 to 1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
<i>Hospitals in existence :—</i>													
Travelling ...	...	2	2	2	2	3	4	5	4	—	4	4	5
Permanent...	...	—	1	1	1	2	4	7	10	11	13	13	13
New patients treated	...	21,937	7,794	12,092	14,342	20,488	28,029	40,670	50,126	52,752	68,304	81,529	82,316
Total attendance of out-patients	...	306,753	132,278	177,761	190,247	236,411	341,211	544,267	686,012	735,919	849,366	903,751	922,614
Operations performed	...	16,402	6,426	9,930	11,486	14,322	21,315	30,648	40,710	42,146	54,205	59,581	54,277
In-patients ...	...	575	208	390	443	678	909	1,807	2,071	2,274	2,454	2,847	3,264
<i>Details :—</i>													
Patients examined	...	...	19,614	22,373	25,514	31,274	43,668	62,233	75,398	71,930	94,447	100,410	90,668
Patients regularly treated...	...	...	7,794	12,092	14,342	20,488	28,029	40,670	50,126	52,752	68,304	81,529	82,316
Incurable cases	...	...	4,550	2,302	1,776	2,620	7,200	9,544	10,554	7,765	9,871	9,675	5,650
Blind in one eye	...	...	1,189	2,116	2,438	3,196	4,115	5,360	6,425	5,637	7,042	9,385	8,969
Blind in both eyes	...	...	852	1,385	3,010	2,811	2,824	3,878	3,591	2,992	3,504	4,611	4,261
Trichiasis cases examined...	...	...	8,159	10,060	7,507	7,871	13,176	17,329	21,624	19,220	22,214	27,341	26,164
“ eyes operated on and cured...	...	...	2,262	3,128	2,022	3,933	6,942	11,700	16,542	19,149	26,094	30,200	28,890
<i>New patients treated per age :—</i>													
Under 1 year	...	...	247	516	457	761	1,495	2,700	2,472	3,023	4,031	5,168	6,434
From 1 to 5 years	...	...	585	1,645	1,497	1,903	3,317	4,631	6,394	5,762	7,865	7,938	8,607
“ 6 „ 10	...	...	902	1,442	4,469	2,101	3,210	4,786	5,634	5,229	6,985	9,217	9,213
“ 11 „ 15	...	...	849	1,294	1,475	2,051	3,056	3,799	4,570	5,651	6,275	7,965	8,483
“ 16 „ 20	...	...	829	1,156	1,499	2,067	2,588	3,253	3,949	4,491	5,752	6,748	6,826
“ 21 „ 40	...	...	2,584	3,775	4,845	6,116	8,167	12,679	17,257	18,492	23,017	28,028	26,904
“ 41 and over	...	...	1,798	2,206	3,100	5,589	6,196	8,822	9,850	10,104	14,379	16,465	15,849

* In 1904 there was only one travelling ophthalmic hospital.

IV.—REPORT ON SECTION IV.

1.—INFECTIOUS DISEASES.

The chief features to be noted in connection with epidemic diseases in Egypt during 1918 are :—

(a) The appearance in the latter half of the year of influenza in severe and widespread form, part of the pandemic of this disease.

(b) The continuance of the menace of the introduction of cholera from Palestine.

(c) A large incidence of typhus and relapsing fevers.

(d) A notable decrease in the incidence of plague cases as compared with 1916 and 1917.

(a) INFLUENZA.

The disease existed in very mild form in the principal towns of Egypt between May and August (inclusive) 1918, without influencing the general death-rate. In September it assumed a more malignant character; numerous epidemics with a high death-rate then occurred all over the country. This wave reached its climax early in December, and by the end of that month was declining sensibly.

The disease first appeared in this country in May 1918 in Alexandria. It was imported from Europe by sea.

Its presence was recognized in Port Said in June; it was imported there, too, by sea.

In Cairo the disease appeared in July in mild form.

In August it was reported in the province of Daqahlîya. Till the end of that month (August 1918) it had not caused any appreciable increase in the death-rate of the civil population. In September, cases with pulmonary complications began to appear in those places mainly where the presence of the disease had already been recognized.

Scattered outbreaks of the disease, with a high rate of pulmonary complication and high death-rate, appeared in the same month in the provinces of Minûfiya and Gharbîya in Lower Egypt, and Girga and Asyût in Upper Egypt.

In October the disease spread quickly over the whole country, the frequency of pulmonary complication and the death-rate increasing rapidly. In November the disease penetrated into every nook and corner of the country. In the first week of December it reached its zenith.

Thus there was no sharp division into two waves of the disease, though there were these two distinct periods :—

First Period.—From May to August inclusive, when, as stated, it appeared in Cairo, Alexandria, Port Said, and Daqahlîya Province as an epidemic of cases of a mild fever lasting a few days and causing no appreciable rise in the death-rate. In this period the exact curve followed by the disease was obscured by the co-existing epidemic of typhus and relapsing fever which appears annually in Egypt in the early spring, reaches its zenith at the end of June, and dies down in August.

Second Period.—From September, and still continuing at the end of December, in which the disease showed a rising rate of pulmonary complication and death from September to the first part of December 1918, and then started to decline.

The itinerary of the disease was as follows :—

May 1918.—Alexandria.

June 1918.—Port Said.

July 1918.—Cairo.

August 1918.—Daqahlîya.

September 1918.—Provinces of Minûfiya, Gharbîya, Qalyûbîya, Gîza, Asyût, and Beni Suef.

October 1918.—All Egyptian provinces.

November 1918.—Sinai Peninsula, Oases of Baharia, Dâkhla, and Khârga.

December 1918.—Stations in the Eastern Desert.

SOURCE OF THE DISEASE.

The disease was certainly introduced from Europe by sea.

It was prevalent to a considerable extent in the British Army (the E. E. F.) both in Egypt and Palestine, before it manifested itself to any extent in the civil population of Egypt. Communication between the Army and the native population was rendered very free by the existence of a Labour Corps of Egyptian *jellahîn* of considerable strength recruited on a six months' basis.

SPREAD OF THE DISEASE.

It spread rapidly in Lower Egypt, where communication by road, railway and river is extremely free. In Upper Egypt the larger towns on the line of railway running from Cairo to Aswân were, generally speaking, first attacked, and from them it spread by road communication to the villages.

There were no zones unattacked except certain small stations on the Red Sea.

The great majority of the 4,059 towns and villages of Egypt were attacked.

At the time of origin of the epidemic in Egypt communication with Turkey did not exist, and the available evidence, in so far as concerns India at least, is that that country was infected certainly not earlier than Egypt.

FAIRS.

In the villages of Egypt the spread of the disease was probably promoted by the great frequency with which fairs are held. In the large villages those are held weekly, and draw large numbers of people from the surrounding villages.

PILGRIMAGE.

Pilgrimages did not enter into the spread of this epidemic in or to Egypt. The disease was not observed in the Mecca Pilgrimage of 1918 by the members of the staff of this Department who did duty with the pilgrims. The Pilgrimage took place in September, and the disease had appeared before the departure of the pilgrims and had assumed the character of a severe epidemic before their return.

MILITARY MOVEMENT.

Military movement played a part in the dissemination of the disease, chiefly as the channel of import. The part played by the existence of the Egyptian Labour Corps has already been noted. This Corps was recruited from the labouring classes in all towns and villages in Egypt, and as the period of service was six months a large amount of movement took place between the Army in Palestine, on the Canal, and in Egypt and the Egyptian towns and villages.

CHANNEL OF IMPORT.

That the first cases should have occurred in the Army was natural, as the communication between Europe and Egypt at the time was practically entirely in the nature of military movement.

WAVES OF THE DISEASE.

As explained above, there was no very marked division into distinct waves, except in the case of the town of Port Said. There a wave of a very mild form of the disease occurred in June, July and August, followed by a severe high mortality outbreak in October and November; sporadic cases occurred in the interval.

In the case of the other large towns where it was known to exist between May and September, it took the form during that period of a number of mild cases, with no definitely established interval of separation between the commencement and the time in September when it began to assume the form of an epidemic with considerable mortality.

In September it simultaneously appeared in a considerable number of scattered points (see page), showing the same severe type ; where the points were rural districts it is not known whether the outbreaks were preceded by mild cases.

There seems every reason to believe that the disease as seen from September onwards was an aggravated type of that which had been present before, and was not a re-infection. For while the type generally suddenly became more serious owing to the occurrence of pulmonary complication, yet in all outbreaks until the disappearance of the disease mild cases continued to be seen such as constituted the only type met with in the early months, May to August.

NUMBER OF CASES.

The total number of cases is not known. It must be remembered that, in the case of acute medical disease in this country, the populace, as a whole, even in the large towns, still shows little tendency to seek early medical aid. In the country districts hospitals exist, as a rule, only in the chief towns of provinces, and the proportion of Medical Officers to the populace is in many cases not more than 1 to 100,000. Causes of death are certified by an inspection of the body in that large percentage of cases where the patient has not been seen by a doctor during life. In large towns this is carried out by the Government Medical Officer, in villages by the sanitary barbers.

The total excess of deaths from September 1918 to December 1918 over the average for that period for the preceding two years was 138,648. It may be presumed, as there was no notable prevalence of any other infectious disease, that this total represents roughly the total number of deaths from the disease.

It is difficult, of course, to fix the exact death-rate in the case of a disease presenting so many slight types, but in the village outbreaks in which it was possible to study the death-rate it was found from September 1918 to December 1918 to be about 25 per cent.

The death-rate in the Cairo hospital of the Government and the prisons was :--

	Hospital.	Prisons.
	Per Cent.	Per Cent.
From May to August 1918 	1·03	} 2·07
From September 1918 to December 1918 ...	6·68	

For reasons given above, it is impossible to give any approximate estimate of the number of cases of, or deaths from, pneumonic complications. Statistics for the more severe period of the epidemic show that the larger towns suffered much less severely than the smaller towns and villages.

The lower classes suffered much more severely than the more prosperous, less-crowded, and better-housed classes.

AGE AND SEX.

Analysis of the death returns shows that the disease caused the largest number of deaths above the average in the case of the age periods from 10 to 20. With regard to sex, it was not found that this exercised any effect on mortality.

The number of cases which occurred in the prisons was 2,489, the deaths totalled 67.

Clinical and bacteriological features of infectious disease are not dealt with, as a rule, in this report. It may be said, however, that in these respects the disease showed no important variation from the type as met with in other countries.

The steps indicated below were taken to limit the spread of the disease.

Two circulars for public use were prepared and published in five languages (English, French, Arabic, Italian, and Greek).

(1) On the personal precautions to be taken to avoid the disease and to avoid complications when attacked.

(2) On the necessity of free ventilation.

Copies of these two circulars are appended :—

AVIS OFFICIEL.

INFLUENZA OR SPANISH FEVER CAN BE AVOIDED.

It is caught by breathing directly the poison breathed out by a person sick of the disease. The sick do not always appear to be ill. You will know the disease by the following symptoms : headache, sore throat, discharge from the nose, cough, pains in the body and limbs, and fever.

FOLLOW THESE RULES :—

(1) *To avoid the Disease.*

Avoid breathing the breath of other people.
Avoid all crowds in closed spaces and especially ill-ventilated theatres and cinemas.
Avoid crowded trains and trams—walk whenever possible.
Do not attend any festivities or death wakes.
Keep your windows open ; fresh air and sunlight kill the germ.
Ask for a clean mosquito net when you stay in an hotel.
Do not use a towel used by other people.
Do not use cups or glasses or forks or spoons used by other people unless you know that they have been well washed. Therefore, shun bars and restaurants, unless you are satisfied that these things are properly washed therein.

(2) *If You are attacked by the Disease.*

Try not to spread it : this is a duty.
Go to bed and stay there till two days after you think you are well.
See no visitors. Allow only one person to look after you.
Every time you cough or sneeze, cover the nose and mouth, preferably with a handkerchief, otherwise with your hand. If you do not, you will infect anyone near you. This rule should also be followed by those who are well.
Spit into a handkerchief and have it boiled, or into rags and have them burned.
Keep your windows open and cover yourself well with blankets.

(3) *If you have to nurse a Patient.*

Avoid the patient's breath and do not kiss the patient.
Do what you have to do for the patient and then keep at a distance.
Do not sit by the patient all day.
Allow *no visitors.*
Boil the handkerchief or burn the rags into which the patient spits.
You can protect yourself by wearing a mask of thick gauze over the nose and mouth. Boil this three times a day.
Boil the patient's face towel once a day.
Boil the patient's cup and spoons and forks after each time of using.

MINISTRY OF THE INTERIOR.

DEPARTMENT OF PUBLIC HEALTH.

Precautions against the Spread of Influenza, or "Spanish Fever," in Places where People are congregated together.

Influenza, a highly infectious disease, is contracted by one individual directly inhaling infected material sprayed into the air from the nose, throat or lungs of an infected person, especially by the acts of talking, coughing and sneezing. This method naturally operates chiefly in places where large numbers of people are aggregated together in closed spaces. Where such collections of people are unavoidable, as, for example, in large warehouses and shops, offices, churches, mosques, schools, convents, restaurants, courts of justice, etc., the danger may to some extent be obviated by taking steps to ensure free and continuous ventilation by keeping all doors and windows open.

In schools, the intervals between the classes should be used to the fullest advantage for ventilating the rooms, and the reciting of lessons in unison by the scholars should be discontinued for the duration of the epidemic.

In view of the approaching cold weather, it must be noted that in the present circumstances there is infinitely more danger from an unventilated atmosphere than from a current of cool, pure air.

In the case of schools, offices, shops, etc., persons showing any symptoms of the disease (headache, sore throat, discharge from the nose, cough, pains in various parts of the body, and fever) should not be allowed to remain at their duties.

Both these circulars were inserted in the press, and the press was asked to draw attention to them. The circular on personal precautions was posted all over the country as a poster in every conceivable place. It was scattered broadcast as a handbill ; it was read regularly in mosques and churches ; and religious teachers everywhere were asked to impress the various points on their hearers.

The ventilation circular was sent to all persons controlling places in which considerable numbers of people were aggregated.

At the same time all railway and tram companies were communicated with to arrange for the regular airing and ventilation of their vehicles.

The fullest possible ventilation of all cinemas, theatres, etc., was insisted on.

The Closure of Schools was enforced in the case of Government schools and recommended in the case of private European schools, according to the following lines :—

Schools serving Local Needs.—Remained open unless the sickness rate therein exceeded the general sickness rate of the locality, as the pupils attending such schools were merely sample units of the local population, and the danger of infection to the individual scholar attending such a school from association with persons within the school could not possibly be any greater than would result from a similar degree of intercourse outside.

Schools serving Particular Classes of the Population and Drawing their Pupils from widely scattered Localities.—These had a tendency obviously, by the daily centralization and redispersal of the pupils, to scatter and encourage the spread of the disease. They were therefore converted into schools of the category described under paragraph 1 by the exclusion of the pupils coming from a distance. Where this could not be done, they were closed.

Boarding Schools.—These were not closed, either when infected or non-infected, because in the first case the dispersal of the pupils would have spread the infection to the outside general population, and in the second case closure would have been disadvantageous, as it would have meant the removal of the pupils from the area free from infection and their dispersal into probably infected areas, where they might be exposed to less favourable conditions of life than would be the case if they remained in school. Boarders were not allowed to go home at week-ends.

Mixed Day and Boarding Schools.—These schools were converted into the category described under paragraph 1 by the exclusion of day pupils coming from a distance. Boarders were not interfered with, except that they were not allowed to go home at week-ends unless their homes were within the radius from which day scholars were allowed to attend.

Kuttabhs, i.e. Elementary Village Schools.—Government *kuttabhs* and Government-inspected *kuttabhs*, if passed by the Ministry of Education as sanitary, were allowed to remain open. Other *kuttabhs* were closed on account of their generally overcrowded and insanitary condition.

Higher Schools and Colleges.—These and schools under the Department of Technical Education were allowed to remain open. In the majority of cases the students were adults, and their condition is comparable to that of any collection of persons earning their living.

Al Azhar (the Moslem University) and other similar Educational Institutions.—Owing to the generally crowded conditions under which the students live, and to the fact that at short intervals large numbers of these students drawn from widely spread areas make journeys to their homes, these institutions were closed temporarily.

Cinemas, etc. — The anomalous position in respect of legal powers *vis-à-vis* Europeans would have made it very difficult to arrange for the closing of cinemas. But the fullest ventilation of all theatres and cinemas was insisted on. The granting of licences for travelling theatres was suspended.

Restriction of Movement and Prevention of Crowds.—All funeral celebrations were stopped, an important factor in Moslem countries. The sitting of village tribunals and recruiting operations for the Egyptian Army were temporarily suspended.

No restriction of movement was practised at any of the Egyptian frontiers. In the opinion of this Administration such a measure would have been useless.

The general public and the press manifested considerable interest in the propaganda, and the impression is that the steps taken were of considerable value in curtailing the epidemic. Such closure of meeting-places as was enforced certainly did not succeed in stopping the march of the epidemic. It did, however, in our opinion, help to curtail its ravages.

II.

The use of masks by the personnel of the Government hospital engaged in nursing influenza cases was ordered. It is difficult to say in the case of native personnel of lower grade how far this order was carried out; where it was carried out the impression is held that the results were beneficial, though, of course, in the middle of a widespread epidemic the chances of infection are so great that it is difficult to assess the value of any one preventive measure.

No drug has been found to be of value as a preventive.

Vaccination.—The Department provided itself with a considerable quantity of prophylactic and curative vaccine. It advised the medical profession and pharmacists of this fact, and placed this vaccine at their disposal at cost price. These vaccines were made by Parke, Davies & Co. Prophylactic anti-catarhal vaccine and therapeutic mixed vaccine: little use was made of this vaccine by the outside public. The Department caused all its staff working in hospitals in connection with influenza to be vaccinated against influenza: the facts that the numbers involved are small, and that a certain number of those vaccinated had already been attacked before this was done, would make any deductions from the apparent results unreliable.

Isolation as a method of limiting the disease was considered. In view of the following facts it was not adopted:—

(1) That the disease is infectious from its first appearance.

(2) That it is often difficult to make a definite diagnosis in the early stages or in mild cases.

(3) That its diffusion is extensive and rapid, and largely affects the wage-earning periods of life.

(4) That it is impossible to expect the public to consider uncomplicated influenza as a dangerous infectious disease justifying the restrictions imposed on sufferers from other infectious disease, the Public Health Administration found itself in agreement with the generally recognized opinion that centrally organized and imposed isolation was an impracticable measure in dealing with cases of uncomplicated influenza.

The Medical Officers of the Department received circulars of instructions embodying all the measures described above.

The help of the organization of the Ministry of Interior was invoked, as in cholera epidemics, to assist in providing the action necessary on the lines indicated above.

Meetings of the head men of all villages all over the country were held; the nature of the disease and steps necessary to its curtailment were explained to them.

In addition, special sanitary inspectors were sent out to heavily infected villages; they were charged with the following duties:—

(1) To see that the posters and handbills of personal precautions had been received, and that every method was being followed to make their contents known.

(2) To arrange for voluntary isolation in some large airy house lent by the notables of cases which could not be suitably isolated in their own houses.

(3) To arrange the loan of Government clothing and blankets in necessitous cases.

Organization of Medical Assistance.—It should be explained that in all Governorate towns (Suez, Cairo, Port Said, Alexandria, and Damietta) and in the chief towns of all Mudîrîyas or provinces (total, fourteen) there are Government hospitals.

In the sub-divisions of Governorates or Markazes (eighty in all) there is stationed, in every case, a Government Medical Officer (in some cases two). There is in each Markaz a Government dispensary where no private pharmacy exists; there are in a few instances in Markaz towns Government hospitals as well.

In Government hospitals in the provinces special wards were set aside for the treatment of poor influenza cases, and the second Medical Officers of the hospitals were entrusted with the free treatment of poor cases in their houses.

In addition to this, all Markaz Medical Officers were instructed to treat poor cases in their houses gratuitously and to offer them drugs free. Special Medical Officers were also delegated from Central Administration to places heavily infected, for the purpose of administering this free treatment.

In addition to the above measures, special influenza hospitals were put up in the following places, wherein the disease was most widely spread, for the free treatment of poor influenza cases who desired such treatment:—

Samâlût, Sinnûris, Akhmîm, Balyana, Bilbeis, Fâqûs, Disûq, Simbillâwein, Mehalla el Kobra (Provincial Council ophthalmic hospital was utilized for the purpose), Tala, Minûf, Luxor (Messrs. Cook's hospital was kindly lent to this Department for treatment of influenza cases).

The drug, the use of which was considered to have given the greatest success in the treatment of cases with pulmonary complication, was cacodylate of Guaiacol.

(b) RELAPSING FEVER.

The total number of cases of this disease notified during the year was 12,642 ; the death-rate was 6·6 per cent. This death-rate is 2·2 per cent lower than the average of the three previous years. This is due to the fact that a considerable number of cases of influenza were diagnosed and returned as relapsing fever. This mistake occurred largely in the country districts, where the occurrence of influenza in widespread form from September to December threw a most considerable strain on the Markaz doctors. Owing to the war the Department was then working considerably under strength. The probability of this confusion was foreseen, and every endeavour was made to obtain as exact diagnosis as possible. Blood examinations were carried out wherever feasible, but a considerable error undoubtedly crept in. Thus the relapsing fever curve, which had practically dropped to normal at the end of August, showed an altogether unusual ascent in September, October, and November.

10,202 cases were notified up to the end of August, and 2,440 were notified from September 1 to December 31, *i.e.* 0·19 of the total cases for the year were signalled in the last four months of the year. In the corresponding period of the two previous years the corresponding fraction of the total cases was : 1916, 0·1 ; and 1917, 0·04.

The occurrence of the large amount of the disease recorded was due to a continuance of those special war conditions which caused the large epidemics of the two previous years. The disease was uniformly spread over the country, the large towns, the ports, and the villages all suffering.

Of the 12,642 cases recorded, 1,375 occurred in Cairo, 496 in Alexandria, 1,003 in Port Said, 354 in Suez, and 9,414 in the provinces.

The following table shows the number of relapsing fever cases and deaths reported during the last six years :—

TABLE XXXIII.—COMPARATIVE STATISTICS OF RELAPSING FEVER CASES.

YEAR.	Cases.	Deaths.	Percentage Death Rate.
1913... ..	342	45	13·4
1914... ..	218	28	12·8
1915... ..	761	72	9·4
1916... ..	10,494	826	7·8
1917... ..	11,162	1,043	9·3
1918... ..	12,642	829	6·6

(c) TYPHUS FEVER.

The number of cases scheduled (42,953) is the second largest on record. But, as in the case of relapsing fever, a considerable error occurred from faulty diagnosis owing to the outbreak of influenza. An attempt was made to limit this error by insisting on the carrying out of the Weil-Felix test wherever circumstances permitted. The amount of this error is indicated by the fact that in 1918 0·09 of the total number of cases were notified in the period September to December, while in the three previous years the average for this period was 0·04.

The remarks made above as to relapsing fever, with reference to distribution and cause of the high incidence, apply to this disease.

Of the 24,953 cases recorded :—

5,094 cases occurred in Cairo.

3,800 cases occurred in Alexandria.

919 cases occurred in Port Said.

The Mudîrîyas which suffered greatly from this disease were :—

Gharbîya, in which 2,293 cases were recorded.

Beheira, in which 1,511 cases were recorded.

Minûfiya, in which 1,343 cases were recorded.

Asyût, in which 1,312 cases were recorded.

The following table shows the number of typhus fever cases and deaths reported during the last six years :—

TABLE XXXIV.—COMPARATIVE FIGURES OF TYPHUS FEVER CASES.

YEAR.	Cases.	Deaths.	Percentage Death Rate.
1913... ..	4,936	1,438	28·9
1914... ..	9,508	2,533	26·6
1915... ..	17,096	4,216	25·2
1916... ..	30,507	7,096	23·2
1917... ..	18,569	4,174	22·4
1918... ..	24,953	6,589	26·4

(d) PLAGUE.

The total number of declared cases of plague in 1918 was 357, as compared with 732 in 1917, and 1,702 in 1916.

The number of deaths in 1918 was 153, showing a mortality of 42·8 per cent, compared with 399, or 54·5 per cent in 1917.

Of the 357 cases referred to, 306 cases were of the bubonic, 17 of the septicæmic, and 34 of the pneumonic type.

TABLE XXXV.—NUMBER OF CASES AND DEATHS FROM PLAGUE IN 1918.

Town or District.	Province.	Cases.	Deaths.
Cairo	Governorate ...	1	1
Alexandria	" ...	4	3
Port Said	" ...	16	8
Kantara	Canal Govern. ...	1	1
El Saff	Gîza	1	—
Itsa	Faiyûm	20	11
Sinnûris	"	11	4
Faiyûm	"	3	3
Beni Suef	Beni Suef... ..	7	6
Minya	Minya	58	27
Abu Qurqâs	"	11	2
Fashn	"	143	33
Samâlût	"	22	13
Maghâgha	"	12	4
Beni Mazâr	"	8	4
Mallawi	Asyût	9	4
Balyana	Girga	28	27
Luxor	Qena	2	2
TOTAL		357	153

TABLE XXXVI.—RECAPITULATION OF PLAGUE STATISTICS, 1899-1918.

YEAR.	Cases.	Deaths.	Deaths per Cent.
1899	93	45	48·0
1900	127	60	47·2
1901	205	102	49·5
1902	481	291	60·0
1903	303	160	52·7
1904	854	501	58·6
1905	266	181	68·0
1906	631	475	75·2
1907	1,253	914	72·9
1908	1,511	780	51·6
1909	513	207	40·5
1910	1,238	615	49·7
1911	1,656	1,041	62·9
1912	884	441	49·9
1913	654	304	46·5
1914	219	111	50·7
1915	235	120	51·0
1916	1,702	828	48·7
1917	732	399	54·5
1918	357	153	42·8

(e) MALARIA.

The following table shows the number of cases of the disease which have come under the notice of the Administration during the year 1918 :—

TABLE XXXVII.—MALARIA CASES.

LOCALITY.	Cases.	LOCALITY.	Cases.
		<i>Brought forward</i> ...	270
Cairo	23	Qalyûbiya	15
Alexandria	10	Sharqîya	35
Ismailia	17	El Giza	3
Port Said	14	Beni Suef	21
Damietta	1	El Faiyûm	61
Suez	95	El Minya	10
Sinai Province	1	Asyût	12
Oases	5	Girga	4
Beheira	8	Qena	15
Gharbiya	21	Aswân	2,090
Minûfiya	75		
<i>Carried forward</i> ...	270	TOTAL	2,536

The Malaria Commission alluded to in last year's report continued its work throughout this year on the lines described. The Government granted a credit of L.E. 22,805 in the budgetary year April 1918–March 1919 for anti-malaria work. This Commission is engaged in drawing up a preliminary note on malaria in Egypt.

(f) CHOLERA.

The menace of importation of the disease from Palestine referred to in the reports of the two previous years existed during 1918, especially in the early months. In order to co-ordinate the efforts of those concerned in its exclusion, a Civil and Military Commission was constituted by order of His Excellency the High Commissioner and the Commander-in-Chief. On this Commission the International Quarantine Board, the Military Medical Authorities, and the Department were represented.

The chief matters dealt with by the Commission were :—

(1) The measures necessary to prevent the importation of the disease by native levies in Army employment and by prisoners of war.

(2) The modification of maritime quarantine measures rendered necessary by military considerations.

Measures in connection with native levies :—

(a) The Egyptian Labour Corps during this year reached a very considerable strength. They were largely employed east of the Suez Canal. Their recruitment continued as before on a basis of a few months' service, and there was therefore a continuance during 1918 of the need for the sanitary control of these labourers on their return to Egypt which was first established in 1917.

The successful invasion of Palestine which took place at the end of 1917 involved the occupation of territory in which cholera had existed in the civil population.

Several cases of cholera in the person of returning Egyptian Labour Corps labourers were detected in Egypt late in December 1917 by the system of address-taking then in vogue. This system was therefore reinforced by the imposition of a period of five days' quarantine and disinfection at Kantara and Port Said for all Egyptian levies before returning to Egypt. All cases of diarrhoea were subjected to bacteriological examination. These measures were administered by the A.D.M.S., Egyptian Hospitals ; the Department lent medical and subordinate staff to reinforce army personnel.

Seven cases were discovered by this system, all at Port Said.

In addition, legal powers were obtained to compel all local subjects leaving Kantara to give their addresses and submit to medical observation at their destinations. (Law No. 3 of February 9, 1918.)

By the exercise of this passenger control many cases of typhus and relapsing fever were incidentally discovered and isolated early.

The following list shows the number of men returning into Egypt *via* Kantara in 1918, those found and those not found :—

Total Number.	Observed.	Not Observed.	Observed. Per Cent.
280,044	271,465	8,579	96·9

(b) The Commission arranged with D.M.S., E.E.F., that all Egyptians recruited for the Labour Corps should be vaccinated against cholera. The first dose was given by the Departmental Markaz Medical Officer on the occasion of the first medical examination, the second dose at the Corps Depot at Kantara by Medical Officers lent to the Army by this Administration for this purpose.

Prisoners of war were carefully segregated for ten days by the Army after capture. All cases of diarrhoea occurring during this quarantine were bacteriologically examined.

The bacteriologists of the Army Medical Service and of this Administration kept in close touch, with the object of exchanging specimens of all vibrios found, and of unifying their methods of diagnosis as far as possible.

The institution of this Commission proved, from the point of view of the Department, of the greatest utility.

With regard to the strictly departmental work in cholera, a revised edition of the cholera handbook, laying down the measures to be taken for the detection and suppression of this disease, was issued during the year.

In view of the fact that new methods of treatment, disinfection, and water sterilization had been evolved since the country was last seriously threatened with the disease, it was thought advisable that all the Departmental disinfectors and selected intelligent village barbers (about 150 in number) from all over the country should be trained practically in these methods. Two schools were established, one at Asyût in Upper Egypt and the other at Tanta in Lower Egypt.

Model cholera camps were established at these places, lectures and demonstrations were given on disinfection, elementary treatment by Roger's method, management of village outbreaks, including purification of wells and methods of ensuring uncontaminated supplies from canals, methods of distributing literature laying down precautions for the public, etc.

(g) SMALL-POX.

The number of cases reported during 1918 is the lowest during the last ten years.
The following table shows the number of cases and deaths recorded during the last six years :—

TABLE XXXVIII.—COMPARATIVE STATISTICS OF SMALL-POX CASES.

YEAR.	Cases.	Deaths.	Percentage Death rate.
1913	2,934	706	24
1914	7,097	1,564	22
1915	5,222	1,262	24·1
1916	2,972	902	26
1917	1,567	409	26
1918	1,198	306	26·4

(h) MALTA FEVER.

Thirty-four cases were notified in Egypt during the year.
Thirteen cases of these occurred in Port Said, where goats' milk forms the only available supply.

The following steps were taken to limit the spread of the disease in that town. The public were informed, through the press and the use of a handbill and poster, of the method by which the disease is normally contracted, and were advised to boil all milk used. All milk vendors were registered by an order issued under martial law, and owners of public establishments such as restaurants were warned to boil all milk used by them. These establishments were inspected to ensure that this was carried out, and where any neglect was met with the establishment was put "out of bounds" to troops.

The usual detailed statistics of infectious diseases which occurred during the year are appended.—

TABLE XXXIX.—NOTIFIABLE INFECTIOUS DISEASES IN GENERAL, 1918.

GOVERNORATES.	SMALL-POX.		MEASLES.		DIPHTHERIA.		TYPHOID.		TYPHUS.		RELAPSING.		PLAGUE.		SCARLET FEVER.		CEREBRO-SPINAL MENINGITIS.		CHOLERA.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cairo	40	4	174	78	873	251	1,836	623	5,094	1,919	1,375	99	1	1	111	5	26	10	1	1
Alexandria	15	4	318	122	111	23	706	150	3,800	895	496	37	4	3	125	3	16	16	—	—
Damietta	2	—	—	—	5	3	32	4	621	68	6	—	—	—	—	—	1	1	—	—
Port Said	7	2	2	—	8	1	89	34	919	723	1,003	161	17	9	6	1	1	—	14	5
Suez	24	5	200	3	20	3	89	9	127	15	354	32	—	—	—	—	12	6	—	—
Ismailia	2	—	1	1	5	1	15	4	333	114	6,219	3	—	—	—	—	1	1	—	—
Frontier Districts... ..	—	—	15	—	—	—	2	1	94	6	3	2	—	—	—	—	1	1	—	—
TOTAL... ..	90	15	710	204	1,022	282	2,769	825	10,988	3,740	9,456	334	22	13	242	9	57	35	15	6

TABLE XXXIX.—NOTIFIABLE INFECTIOUS DISEASES IN GENERAL, 1918 (*continued*).

PROVINCES AND DISTRICTS.	SMALLPOX.		MEASLES.		DIPHTHERIA.		TYPHOID.		TYPHUS.		RELAPSING.		PLAGUE.		SCARLET FEVER.		CEREBRO-SPINAL MENINGITIS.		CHOLERA.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Gharbiya Province :—</i>																				
Tanta...	—	—	1,078	671	7	2	3	1	425	68	108	10	—	—	—	—	1	—	—	—
Kafr el Sheikh	—	—	—	—	—	—	—	—	184	23	25	—	—	—	—	—	—	—	—	—
Mahalla el Kubra	—	—	3	2	37	17	2	1	361	57	24	2	—	—	—	—	—	—	—	—
Shirbin	—	—	99	26	3	1	—	—	15	3	1	—	—	—	—	—	—	—	—	—
Kafr el Zaiyât...	—	—	9	1	—	—	—	—	442	40	51	2	—	—	—	—	—	—	—	—
Disûq	—	—	—	—	—	—	—	—	138	21	1	—	—	—	—	—	—	—	—	—
Santa	—	—	—	—	—	—	1	—	374	64	264	2	—	—	—	—	—	—	—	—
Talkha	17	—	—	—	1	—	—	—	130	8	4	—	—	—	—	—	—	—	—	—
Fuwa	—	—	—	—	3	2	—	—	59	6	—	—	—	—	—	—	—	—	—	—
Zifta ...	—	—	2	2	6	4	—	—	162	22	28	4	—	—	—	—	—	—	—	—
Burullus	—	—	—	—	—	—	—	—	3	1	—	—	—	—	—	—	—	—	—	—
TOTAL ...	17	—	1,191	702	57	26	7	2	2,293	313	506	22	—	—	—	—	1	—	—	—
<i>Daqahliya Province :—</i>																				
Mansûra ...	8	2	4	—	24	8	14	3	367	59	34	4	—	—	—	—	—	—	—	—
Simbillâwein	—	—	1	—	—	—	—	—	81	8	8	—	—	—	—	—	—	—	—	—
Mit Ghamr	20	5	9	—	6	2	—	—	365	51	105	7	—	—	—	—	—	—	—	—
Dikirmis	1	1	252	146	3	1	—	—	181	42	33	4	—	—	—	—	—	—	—	—
Aga ...	—	—	—	—	2	2	2	1	136	19	6	1	—	—	—	—	—	—	—	—
Fâriskûr	—	—	544	236	—	—	—	—	66	13	—	—	—	—	—	—	—	—	—	—
TOTAL ...	29	8	810	382	35	13	16	4	1,196	192	186	16	—	—	—	—	—	—	—	—
<i>Beheira Province :—</i>																				
Damanhûr	—	—	—	—	4	3	3	2	152	51	—	—	—	—	1	—	—	—	—	—
Shubra Khit	—	—	—	—	1	—	—	—	135	24	2	1	—	—	—	—	—	—	—	—
Ityâi el Barûd...	—	—	—	—	—	—	—	—	357	36	—	—	—	—	—	—	—	—	—	—
Rashid	—	—	42	4	4	3	1	—	90	21	1	—	—	—	—	—	—	—	—	—
Kôm Hamâda	—	—	9	2	—	—	—	—	288	43	—	—	—	—	—	—	—	—	—	—
Abu Hummus	7	1	—	—	—	—	—	—	211	28	—	—	—	—	—	—	—	—	—	—
Dilingât ...	—	—	—	—	—	—	—	—	111	17	—	—	—	—	—	—	—	—	—	—
Kafr el Dauwâr	—	—	—	—	—	—	—	—	121	8	10	1	—	—	—	—	—	—	—	—
Ramleh	1	—	—	—	—	—	—	—	46	12	—	—	—	—	—	—	—	—	—	—
TOTAL ...	8	1	51	6	9	6	4	2	1,511	240	13	2	—	—	1	—	—	—	—	—

<i>Sharqīya Province:—</i>															
Zagazig	70	7	3	—	6	1	7	1	283	51	55	3	—	—	—
Minyet el Qamh	16	3	—	—	—	—	—	—	30	16	2	—	—	—	—
Bilbeis	2	1	—	—	1	1	1	—	10	6	1	1	—	—	—
Hiyya	31	6	—	—	—	—	2	—	198	39	—	—	—	—	—
Kafr Saqr	29	4	—	—	—	—	—	—	34	3	16	1	—	—	—
Faqûs	32	1	—	—	1	—	1	1	237	34	7	—	—	—	—
TOTAL	180	22	3	—	8	2	11	3	792	149	91	5	—	—	—
<i>Minūfiya Province:—</i>															
Shibîn el Kôm	7	1	1	—	—	—	18	6	470	76	161	24	—	—	—
Minûf	—	—	125	19	—	—	2	1	274	80	29	4	—	—	—
Tala	45	16	70	34	—	—	2	2	64	19	608	152	—	—	—
Quweisna	—	—	19	11	—	—	—	—	359	108	92	29	—	—	—
Ashmûn	29	5	29	13	—	—	—	—	176	30	12	1	—	—	—
TOTAL	81	22	244	77	—	—	22	9	1,343	313	902	210	—	—	—
<i>Qalyûbiya Province:—</i>															
Benha	35	8	13	5	4	1	4	2	131	43	1	—	—	—	—
Shibîn el Qanâtir	—	—	—	—	6	3	1	—	108	7	5	—	—	—	—
Tûkh	1	—	38	8	—	—	1	—	117	16	435	44	—	—	—
Qalyûb	1	—	1	1	3	—	2	1	370	47	3	—	—	—	—
TOTAL	37	8	52	14	13	4	8	3	726	113	444	44	—	—	—
<i>Giza Province:—</i>															
Giza	2	1	94	15	4	3	6	1	215	79	31	1	—	—	—
Imbâba	—	—	119	86	—	—	—	—	208	43	8	1	—	—	—
El 'Aiyât	1	—	—	—	—	3	—	—	93	10	6	2	—	—	—
El Saff	—	—	10	1	4	—	—	—	284	32	6	1	1	—	—
TOTAL	3	1	183	102	8	6	6	1	800	164	51	5	1	—	—

TABLE XXXIX.—NOTIFIABLE INFECTIOUS DISEASES IN GENERAL, 1918 (continued).

PROVINCE AND DISTRICT.	SMALLPOX.		MEASLES.		DIPHTHERIA.		TYPHOID.		TYPHUS.		RELAPSING.		PLAGUE.		SCARLET FEVER.		CEREBRO-SPINAL MENINGITIS.		CHOLERA.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Faiyûm Province:—</i>																				
Faiyûm	9	—	8	10	2	1	35	8	103	23	51	4	3	—	—	—	—	—	—	—
Itsa	1	—	6	—	—	—	1	—	118	22	47	4	20	—	—	—	—	—	—	—
Sinnûris	2	1	1	1	2	1	1	—	236	48	36	3	11	—	—	3	—	—	—	—
TOTAL	12	1	15	11	4	2	37	8	457	93	134	11	34	—	—	3	2	—	—	—
<i>Beni Suef Province:—</i>																				
Beni Suef	1	—	6	—	13	4	11	3	101	20	74	2	7	—	2	—	—	—	—	—
Biba	1	—	1	—	—	—	1	—	124	60	26	1	—	—	—	—	—	—	—	—
Wasta	36	1	11	1	—	—	—	—	171	6	33	—	—	—	—	—	—	—	—	—
TOTAL	38	1	18	1	13	4	12	3	396	86	133	3	7	—	2	—	—	—	—	—
<i>Minya Province:—</i>																				
Minya	66	19	5	3	31	8	22	5	48	11	41	4	58	—	—	—	—	—	—	—
Abu Qurqâs	15	8	—	—	1	1	—	—	45	13	15	2	11	—	—	—	—	—	—	—
Samalût	48	10	—	—	—	—	—	—	6	2	1	—	22	—	—	—	—	—	—	—
Beni Mazâr	76	22	—	—	5	4	—	—	7	3	8	3	8	—	—	—	—	—	—	—
Maghâgha	—	—	—	—	—	—	—	—	94	33	—	—	12	—	—	—	—	—	—	—
Fashn	—	—	6	—	3	2	3	1	69	12	2	—	143	—	—	—	—	—	—	—
TOTAL	205	59	11	3	40	15	25	6	269	74	67	9	254	—	1	—	—	—	—	—
<i>Asyût Province:—</i>																				
Asyût	121	43	1	—	35	14	77	27	272	94	69	10	—	—	—	—	—	—	—	—
Mallâwi	73	31	—	—	18	14	24	1	148	49	—	—	9	—	—	—	—	—	—	—
Dairût	83	30	56	38	3	1	—	—	107	9	12	4	—	—	—	—	—	—	—	—
Manfalût	28	5	187	130	3	3	60	31	73	26	—	—	—	—	—	—	—	—	—	—
Abu Tig	3	1	—	—	3	1	3	—	310	117	2	1	—	—	1	—	—	—	—	—
Badâri	46	19	—	—	3	—	—	—	297	81	—	—	—	—	—	—	—	—	—	—
Abnûb	5	—	—	—	—	—	—	—	105	40	1	—	—	—	—	—	—	—	—	—
TOTAL	359	129	244	168	65	33	164	59	1,312	416	84	15	9	—	1	—	2	—	—	—

[illegible]

The following diseases were also recorded:—

TABLE XL.—MINOR EPIDEMIC DISEASES.

Disease.	Cases.	Deaths.
Chicken-pox	359	6
Malaria	359	14
Parotitis	1,124	28
Whooping cough	232	53
Anthrax	11	8
Leprosy	7	7
Bilious fever	1	1
Malta fever	34	3

2.—PILGRIMAGE.

Owing largely to war conditions, including difficulty in providing shipping, only 464 persons proceeded on the Pilgrimage in addition to the Mahmal escort and staff, which were 169 in number.

All pilgrims were vaccinated against cholera by the Mahmal Medical Officer.

No visit was made to Medina owing to the fact that it was still in Turkish hands.

In view of the occurrence of two cases of plague on board a ship coming from Jedda, the Quarantine Board declared the Pilgrimage infected, and consequently pilgrims were quarantined at Tor for a period of ten days.

The health of all pilgrims was good. On arrival at Suez only two were found unfit, one with influenza and the other with senility.

The result of observation was satisfactory, as all pilgrims (464 in number) were traced and observed with the exception of two.

3.—“ MULIDS ” (ANNIVERSARY FAIRS).

In 1918 the Department gave its opinion regarding the holding of three *mulids*, the period of celebration of which varied from three to fifteen days each.

4.—BARBERS.

(a) *Specially trained in First Aid*.—No barbers were trained in first aid in 1918, and no first-aid chests were issued.

(b) *Sanitary Barbers*.—591 barbers were given sanitary permits during the last year.

5.—PASSENGER AND IMMIGRANT CONTROL.

The usual statistical tables showing the work done under this heading are appended.

TABLE XLI.—STATISTICS OF PASSENGERS WHO LANDED IN PORT SAID FROM SHIPS COMING FROM CHOLERA-INFECTED COUNTRIES DURING 1918.

DESTINATION.	ORDINARY PASSENGERS.						TRANSIT PASSENGERS.					
	1st and 2nd Class.			3rd Class and Deck.			1st and 2nd Cl ss.			3rd Class and Deck.		
	Found.	Not found.	Percentage of found.	Found.	Not found.	Percentage of found.	Found.	Not found.	Percentage of found.	Found.	Not found.	Percentage of found.
Cairo	30	4	88	61	14	81	—	—	—	—	—	—
Alexandria	29	—	100	87	14	86	—	—	—	—	—	—
Interior	—	—	—	19	2	90	—	—	—	—	—	—
Port Said	23	—	100	774	1	99	—	—	—	—	1	0
TOTAL	82	4	95	941	31	96	—	—	—	—	1	0

Total passengers found 1,023. Total passengers not found 36. Percentage of passengers found 96.

TABLE XLII.—STATISTICS OF PASSENGERS WHO LANDED AT ALEXANDRIA IN 1918 FROM SHIPS COMING FROM CHOLERA-INFECTED COUNTRIES.

MONTHS.	PASSENGERS FOR CAIRO.				PASSENGERS FOR INTERIOR.				PASSENGERS REMAINED AT ALEXANDRIA.				TRANSIT PASSENGERS.				TOTAL.			
	1st and 2nd Class.		3rd Class.		1st and 2nd Class.		3rd Class.		1st and 2nd Class.		3rd Class.		2nd Class.		3rd Class.		1st and 2nd Class.		3rd Class.	
	Found.	Not found.	Percentage Found.	%	Found.	Not found.	Percentage Found.	%	Found.	Not found.	Percentage Found.	%	Found.	Not found.	Percentage Found.	%	Found.	Not found.	Percentage Found.	%
January ...	—	—	—	—	—	—	—	—	1	—	100	100	—	—	—	—	1	—	100	100
February ...	—	—	—	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100
March ...	—	—	—	—	—	—	—	—	1	—	100	100	—	—	—	—	1	—	100	100
April ...	2	—	100	100	4	—	100	100	11	1	91	100	3	—	100	100	20	1	95	100
May.. ...	—	—	—	—	—	—	—	—	—	—	—	100	—	—	—	—	—	—	—	100
June ...	—	—	—	—	—	—	—	—	13	—	100	100	2	—	100	100	15	—	100	100
July... ...	1	—	100	100	3	—	100	100	1	—	100	100	—	—	—	100	2	—	100	100
August ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100
September ...	4	—	100	100	9	—	100	100	19	—	100	100	2	—	100	100	25	—	100	100
October ...	—	—	—	—	—	—	—	—	—	—	—	100	—	—	—	—	—	—	—	100
November ...	16	—	100	100	3	—	100	100	3	—	100	95	—	—	—	—	21	—	100	96
December ...	1	—	100	100	12	1	92	—	3	—	100	99	—	—	1	100	4	—	100	99
TOTAL ...	24	—	100	100	35	1	97	—	53	1	98	99	7	—	100	100	90	1	98	99

Total number of Passengers { Found 1,653 } Percentage of Passengers **Found, 99** per cent.
Not found 5
Total (general) 1,658 (including 7 passengers sent to hospital).

TABLE XLIII.—PASSENGERS

PORTS.	JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.			JUNE.			JULY.		
	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.
<i>Under arrêté:</i>																					
Jedda ...	50	3	0	35	2	0	15	3	1	27	0	0	56	0	2	60	0	0	60	1	0
Aqaba ...	58	4	1	84	9	3	141	2	2	230	1	0	121	2	1	383	24	4	478	26	0
Yembo ...	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Wegh ...	2	0	0	0	0	0	117	0	2	34	0	0	41	0	0	8	0	0	44	0	0
Doba ...	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
Abadan ...	6	0	0	0	0	0	12	0	2	6	0	3	5	0	0	0	0	0	0	0	0
Basra ...	8	0	2	0	0	0	1	0	1	3	0	0	9	1	1	63	0	1	66	1	0
Singapore..	0	0	0	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	11	0	0
Sinaï ...	0	0	0	27	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salonica ...	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total ...	127	7	3	157	18	3	292	5	8	300	1	3	233	3	4	515	24	5	660	28	0
Abu Zenima	279	0	0	153	0	2	162	0	0	150	0	3	148	16	24	133	1	2	233	34	0
<i>Supplementary measures:</i>																					
Other Ports	98	0	2	135	0	1	232	0	12	403	0	25	196	0	4	275	0	4	396	0	13
TOTAL ...	504	7	5	445	18	6	686	5	20	853	1	31	577	19	32	923	25	11	1,289	62	13

N.B.—The increase in the number of passengers who were not found is due to the fact that such passengers were mostly Sherifian subjects who were visiting Egypt for the first time and who gave their address as the Arab Bureau, Cairo, and then failed to report themselves at that address.

The arrivals from Abu Zenima who were not found were practically all labourers, who stated that they were returning to their villages, but the notification lists which were sent by us to the Markaz M.O.s concerned were returned to us by them with certificates that these men had not returned there.

ARRIVING AT SUEZ, 1918.

AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.			TOTAL.		Percentage not found.	KEPT IN HOSPITAL.			
Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.	Kept in Hospital.	Total.	Not found.		Total.	Medical.	Surgical.	Infectious.
50	16	0	62	0	1	25	2	0	46	2	0	32	7	0	518	36	6	4	1	0	3
120	25	0	165	36	12	75	2	6	102	24	2	100	5	0	2,057	160	7	31	11	14	6
1	1	0	22	1	0	0	0	0	0	0	0	0	0	0	27	2	7	0	0	0	0
16	3	2	8	0	0	6	0	0	0	0	0	417	0	0	693	3	0	4	3	1	0
0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	31	0	0	5	5	0	0
3	0	0	0	0	0	5	1	0	1	0	0	20	1	0	179	4	2	5	5	0	0
0	0	0	0	0	0	0	0	0	0	0	0	45	0	0	63	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	7	26	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0
190	45	2	258	37	13	112	5	6	149	26	2	616	13	0	3,609	212	5	49	25	15	9
165	12	0	137	1	0	339	5	0	199	5	0	253	20	0	2,351	94	4	31	3	1	27
318	0	13	210	0	17	366	0	20	345	0	4	308	0	15	3,282	0	0	130	59	33	38
673	57	15	605	38	30	817	10	26	693	31	6	1,177	33	15	9,242	306	3	210	87	49	74

Summary.

PORTS.	Number of Passengers.	Number not found.	Percentage not found.	Kept in Hospital.
			%	
Under <i>Arrêté</i>	3,609	212	5	49
Supplementary Measures	2,351	94	4	31
Other Ports	3,282	0	0	130
Total	9,242	306	3	210

V.—REPORT ON THE PUBLIC HEALTH LABORATORIES.

1.—INTRODUCTION.

During the past ten years the figures for the regular work of the laboratories (excluding examinations made for the Army) have been as follows :—

TABLE XLIV.—COMPARATIVE ANNUAL STATISTICS.

YEAR.	Chemical (including Water and Milk).	Bacteriological (including Water).	TOTAL.
1909	484*	2,755	3,239
1910	1,225†	5,428	6,653
1911	581	5,193	5,774
1912	797	5,268	6,065
1913	813	6,998	7,811
1914	1,828	9,150	10,978
1915	3,870	8,277	12,147
1916	3,345	8,550	11,895
1917	3,207	10,553	13,760
1918	3,625	17,024	20,649

* Khedivial Laboratory.

† Including 718 from Khedivial Laboratory.

The large increase in the bacteriological examinations during 1918 is mainly accounted for by the number of blood films sent from the provinces for examination for the parasites of malaria and relapsing fever and in connection with outbreaks of typhus and plague.

The Local Resources Board and the Food Control Committee have made considerable use of the laboratories both for analyses and advice in connection with questions of adulteration and standards—the latter especially in the case of bread.

The particulars of the large number of diets used by the various Government Administrations have been collected, and these diets are under investigation.

A report on an outbreak of pellagra which occurred amongst Armenian refugees was completed, and will shortly be published as No. 2 of “ Reports and Notes.”

During the course of the year Dr. Wilson, Professor of Physiology at the Qasr el ‘Aini Medical School, was appointed consulting physiologist to the laboratories.

A considerable amount of the time of the Director was occupied as a member of the Commission appointed to advise as regards the future organization and work of the Department of Public Health. The Commission met on seventy-six occasions during the summer, sitting both in Cairo and Alexandria.

The bacteriologist in charge of the diagnosis section, who had contracted Malta fever in the course of his work, returned to duty in February after seven months’ illness.

The Director of the Antirabic Institute returned in April from military service in France after an absence of three years and eight months. Father de Vrégille, who before the war was Director of the Antirabic Institute at Beirut, and who arrived in this country shortly after Dr. Bain’s departure, fortunately was able to carry on the duties of the Director. The history of the Antirabic Institute (published in “ Notes and Reports,” No. 1), as well as the annual reports written during the time that he was acting, speak for the manner in which Father de Vrégille filled this important post.

Arrangements are being made with the Ministry of the Interior by which the boys who are being trained in the laboratories as laboratory attendants may be exempted from military service. Ten boys are at present under training.

Most of the staff suffered for varying periods during the outbreak of influenza which occurred in the autumn—one of the attendants having died as the result of pneumonic complications.

During the absence of the librarian in France on military duty, a rearrangement of the work of the clerks was found necessary. With the assistance of an extra clerk from the Central Administration this was satisfactorily arranged.

2.—BACTERIOLOGICAL SECTION.

The following table gives a list of the examinations made under their several headings. The figures do not include the specimens of water examined bacteriologically ; these are given in the report on the Water Service :—

TABLE XLV.—BACTERIOLOGICAL WORK DONE.

NATURE OF SPECIMEN.	Government.	Private.	Military.	TOTAL.
Cholera	1,808	—	63	1,871
Plague	850	—	14	864
Cerebro-spinal meningitis	4	12	—	16
Diphtheria	252	806	2	1,060
Malaria and relapsing fevers	8,434	72	—	8,506
Cultural examination for enteric	18	10	—	28
dysentery (and microscopic)	18	10	1	29
Agglutination reaction for Malta fever... ..	118	26	1	145
enteric fever	331	264	1	596
Influenza	252	—	—	252
Wassermann reaction	956	10	27	993
Films for gonorrhœa and <i>Spirochaeta pallida</i>	388	14	—	402
Sputum for tuberculosis	119	24	1	144
Urine for bilharzia ova	22	—	3	25
Anthrax	13	—	—	13
Miscellaneous	48	19	1	68
GRAND TOTAL	13,631	1,267	114	15,012

Owing to the large number of specimens received for examination for cholera, incident upon the return of members of the Egyptian Labour Corps to their villages, it was found necessary to institute a special Cholera Service—two Medical Officers (4th class) being appointed. These Medical Officers took alternate day and night duty. This work entailed extra duties on the laboratory attendants—an attendant being on duty till 10 o'clock each evening.

The number of examinations made for Government hospitals and Government services throughout the country shows an increase on last year's figures of 6,087, the increase being mainly under the headings of cholera, plague, malaria and relapsing fevers, enterica and influenza.

The examinations made for private practitioners have also slightly increased, the increase being mainly under the headings of malaria and relapsing fevers and enterica.

Certain examinations were made of specimens sent by the Veterinary Section of the Ministry of the Interior.

The usual diagnosis examinations were made for the Medical Commission and any case of special interest investigated.

The laboratories were constantly in touch with the different Government and military laboratories throughout the country, supplying them with such materials as were available. Media and standard cultures were issued when required, especially to the bacteriological car at Ismailia. The bacteriological car, which had been fitted out previous to the outbreak of war by this Department for special provincial work, is still utilized by the military authorities.

Samples of bread and flour were examined and reported on from time to time both for the military authorities and for Government Departments.

The laboratories were regularly consulted by the different Government Departments for advice and report on various specimens, such as disinfectants, filters, milk, etc. Technical opinion was given from time to time to the Stores Section of the Department, especially in connection with contracts.

Special researches were continued in connection with typhus fever (Weil-Felix agglutination tests and passage experiments), relapsing fever, paratyphoid A fever, etc., and the routine weekly examination of specimens for the Wassermann reaction was continued—the latter includes a weekly examination of new admissions to the lunatic asylum.

3.—CHEMICAL SECTION.

The following chemical analyses have been performed during 1918 :—

TABLE XLVI.—CHEMICAL WORK DONE.

SAMPLES RECEIVED FROM	Water.	MANZÛL, HALÂWA, ETC.		BUTTER.			Margarine.	EDIBLE OILS.		MILK.				Epsom Salt (Magn. Sulphate) and Sodium Sulphate.	Drugs, etc.	Miscellaneous.	TOTAL.
		Narcotics or Alkaloids.		Genuine.	Adulterated.			Genuine.	Adulterated by admix- ture with other oils.	Genuine.	Adulterated.	Doubtful (kind of milk not stated).	Abnormal.				
		Present.	Absent.		By admixture with other fats and oils.	Containing an excessive amount of water.											
Govt. Administrations	107	8	1	21	6	—	1	44	8	1,159	514	7	12	1,215	176	153	3,432
General Parquet ...	—	70	45	7	7	—	—	4	1	—	—	—	—	—	—	37	171
Private persons ...	1	—	—	3	—	1	—	—	—	—	—	1	—	—	4	6	16
Military Authorities...	21	—	—	9	1	34	30	16	1	25	31	8	—	—	35	290	501
GRAND TOTAL ...	129	78	46	40	14	35	31	64	10	1,184	545	16	12	1,215	215	486	4,120

The miscellaneous analyses in the preceding table are made up as follows :—

TABLE XLVII.—DETAILS OF MISCELLANEOUS CHEMICAL ANALYSES.

NATURE OF SPECIMEN.	Government.	Parquet.	Military.	Private.	Total.
Biscuits	1	—	46	—	47
Bread	10	5	9	—	24
Beans and Peas...	—	—	3	—	3
Cheese... ..	2	—	2	—	4
Coffee	—	—	3	—	3
Flour and grains	29	32	19	1	81
Fruit and jams...	1	—	13	—	14
Pickles	1	—	5	—	6
Rice	6	—	2	—	8
Vinegar	1	—	18	—	19
Aerated waters, etc.	—	—	—	2	2
Various foodstuffs and beverages	14	—	17	1	32
Alum and alumino-ferric... ..	12	—	2	—	14
Bleaching powder	29	—	121	—	150
Hypochlorite solution and brine	36	—	—	—	36
Various	11	—	30	2	43
GRAND TOTAL	153	37	290	6	486

MILK ANALYSES.

The daily analysis of milk on behalf of the Cairo City Health Inspectorate has been continued during 1918. A summary of the results (which are included in the table of chemical analyses) is appended :—

TABLE XLVIII.—MILK ANALYSES.

DESCRIPTION.	Number.	Percentage.
Genuine	1,097	70·5
Adulterated (skimmed, watered, or both)	459	29·5
Skimmed	135	8·7
Watered... ..	233	15
Skimmed and watered	91	5·8
Abnormal	10	—
Doubtful (kind of milk not stated)	2	—

The following additional examinations of milk have been performed :—

Tinned milk	6
Cream	1

The above tables include the following investigations :—

Owing to the difficulty experienced in obtaining aluminium sulphate from Europe, attempts were made to utilize the deposits at Khârga Oasis for the purpose of water sedimentation. A number of analyses were made of representative samples obtained from the above deposits.

Some determinations were made on the composition of bleaching powder, and upon the effect of temperature on the rate of loss of available chlorine.

The percentages of total mineral matter and sand were estimated in a number of samples of native bread.

The chemical constants of certain artificial butters were determined.

In connection with a charge brought against a local contractor of adulteration of flour supplied to the British Army, specimens of the consignment in question were examined and reported on.

Tests were performed on an electrolytic plant for the preparation of sodium hypochlorite, recently installed at the Hospital for the Insane at Abbassia.

Weekly analyses of the Rod el Farag wells were made during the period of the high Nile.

Consignments of Epsom salts imported into Egypt during the year 1918 have been tested for arsenic. In the majority of cases the proportion of arsenic present was excessively high.

4.—WATER SERVICE.

The number of analyses of water and ice made for all purposes during the year were as follows :—

TABLE XLIX.—WATER AND ICE ANALYSES.

	Number of Samples.	Examined for Total Bacteria.	Examined for Lactose Fermenters.
<i>Bacteriological.</i>			
Cairo :—			
Rôd el Farag supply	454	454	454
Gîza supply	240	240	240
Me'âdi supply	399	399	399
Daily samples of tap water in Cairo	325	325	—
Various supplies	5	5	5
Military supplies	46	46	46
Aerated waters :—			
Cairo	454	—	454
Ismailia	52	—	52
Port Said	111	—	111
Suez	10	—	10
Military	4	—	4
Ice: Cairo	76	76	76
TOTAL	2,176	1,545	1,851
<i>Chemical.</i>			
Public supplies	107	—	—
Military „	21	—	—
Private supply	1	—	—
TOTAL	129	—	—

5.—VACCINE INSTITUTE.

The amount of vaccine lymph issued in 1918 was 1,428,500 doses, against 1,558,677 in 1917, showing a decrease of 130,177 units.

This issue was made up as follows :—

	Doses.
Public Health Inspectors (<i>Bandars</i>)... ..	134,855
„ „ „ (villages)	680,140
Extra to Public Health Inspectors	126,340
Egyptian Army	22,110
Ministry of Waqfs	350
Ministry of Education	4,255
Prisons Department	55
Provincial Councils	1,630
Suez Canal Company	2,600
Alexandria Municipality	41,000
Miscellaneous gratis	4,970
British Army	273,550
Sudan Government	81,000
Miscellaneous sales	54,525
Sold to public	1,120
TOTAL... ..	<u>1,428,500</u>

The decrease is mainly under the headings of :—

Alexandria Municipality... ..	41,000 units, against 124,300 in 1917=83,000 less.
British Army	273,559 „ „ 310,841 „ =37,291 „
Sudan	81,000 „ „ 143,635 „ =62,635 „

Excluding the British Army and the Sudan, the issues for Egypt are 1,073,950 doses, against 1,104,201 issued in 1917, showing a decrease of 30,251 units for 1918. This decrease comes under the heading of Alexandria Municipality, which, as stated above, received 83,300 doses less than in the previous year.

6.—SERUM CENTRIFUGING LABORATORY.

The arrangement made for handing over the Centrifuging Laboratory to the Ministry of Agriculture not having yet come into operation, the issue, recentrifuging, and storage of cattle plague serum were continued by the Public Health laboratories.

105,268·5 doses (50 cubic centimetres) of Egyptian serum have been issued on the demand of the Veterinary Service. 31,788 doses (50 cubic centimetres) have been received from India during the year.

The Egyptian serum in stock at the end of 1918 was 115,848 doses. This, together with 51,326 doses of Indian serum, makes a total in stock at the end of the year of 167,174 doses of 50 cubic centimetres.

7.—ANTIRABIC INSTITUTE.

In 1918 a total of 1,009 persons were treated in the Institute. From this number the following deductions should be made :—

Two persons who ceased to attend for treatment without a satisfactory reason.

215 persons whose treatment was discontinued as being unnecessary, the observation of the animal for a period of ten days or more having shown it not to be rabid.

Thirty-three persons whose treatment, although completed, must be considered useless, the animal inflicting the bite having been proved healthy by inoculation of rabbits.

The statistics therefore comprise 759 patients. This figure is an increase of 115 over the number treated in 1917.

I.—MONTHLY INCIDENCE.

The monthly incidence of the 759 cases dealt with in the statistics is shown below :—

	Persons.		Persons.
January	48	July	71
February	50	August	77
March... ..	57	September	74
April	56	October	63
May	86	November	58
June	71	December	48

II.—TOPOGRAPHICAL DISTRIBUTION.

The 759 persons treated may be subdivided as follows :—

	Persons.
Egyptians	645
Foreigners resident in Egypt	88
Foreigners not resident	26

Their place of origin was :—

	Persons.		Persons.
<i>Governorates :—</i>		<i>Provinces (continued) :—</i>	
Cairo	93	Beni Suef... ..	24
Alexandria	76	Faiyûm	15
Suez Canal	13	Minya	28
Damietta	5	Asyût... ..	26
		Girga... ..	12
<i>Provinces :—</i>		Qena	14
Qalyûbiya	53	Aswân	3
Sharqîya	76		
Daqahliya	88	Abyssinia	4
Minûfiya	38	Palestine	19
Gharbiya	115	Jaffa	2
Beheira... ..	10	Sinai	3
Gîza	41	Madagascar	1

III.—CLASSIFICATION OF BITING ANIMALS.

The injuries to the 759 patients were inflicted by :—

Dogs... ..	in 636 cases.
Cats	44 „
Wolves	45 „
Monkeys	4 „
Donkeys	3 „
Horses	5 „
Camels	2 „
Jackal	13 „
Rabid human beings	4 „
Infected in the Laboratory	3 „

IV.—POSITION OF THE INJURIES.

96 cases were bites on the head.
 371 cases were bites on naked skin : serious 127 ; slight 244.
 292 cases were bites through clothing.

V.—NOTES ON THE ANIMALS INFLECTING THE BITES.

1. It is to be noted that the number of persons bitten does not correspond to the number of animals causing the bites reported by the Veterinary Service, as in several cases one animal caused the injury to more than one person.

2. As a result of their observation by the Veterinary Service, 209 animals, having bitten 215 persons, were found to be non-rabid.

3. Experimental inoculation of rabbits undertaken at the Institute showed that twenty-two animals (eighteen dogs, two cats, one donkey, and one fox), having bitten thirty-three persons, were healthy.

4. In a certain number of cases definite diagnosis could not be established, and these cases are considered as suspect. The details are as follows :—

329 animals escaped and could not be traced.

Thirty-one animals were killed and the carcasses destroyed.

Ninety-five brains of animals arrived at the Institute in a state of decomposition and no investigation was possible.

Twelve animals remained suspect, the rabbit inoculation being inconclusive.

The total of suspected animals is therefore 467.

5. Rabies was considered to be proved in the case of sixty-five animals having bitten 132 persons. The diagnosis was determined :—

By Veterinary Inspectors in the case of twenty-six animals (twenty-four dogs, one cat, and one jackal) having bitten fifty-seven persons.

By rabbit inoculation in the case of thirty-nine animals (thirty-six dogs, two cats, and one wolf) having bitten seventy-five persons.

6. In the case of eleven animals, having bitten thirty-four persons, positive diagnosis of rabies is presumed by the death of one or more of the persons bitten.

VI.—METHOD OF TREATMENT.

No change was introduced during the year in the methods of preventive vaccination and serotherapy described in the 1916 report.

VII.—STATISTICS.

In accordance with the practice in antirabic institutes elsewhere, the statistics only comprise deaths occurring more than fifteen days after the treatment was completed.

Amongst the persons treated in 1918 there occurred five deaths. Table I attached gives the names and other particulars concerning each of these cases. The corrected mortality rate, representing the cases in which the treatment failed, is therefore 0·6 per cent.

In addition to the above, it is necessary to record the death of six other persons who died either during treatment or less than fifteen days after its completion. The gross mortality comprising all deaths is therefore 1·4 per cent. Table II gives a classification of the cases treated and the mortality-rate.

TABLE L.—NOTES ON PATIENTS WHO DIED IN 1918.

Serial Number.	NAME OF PATIENT.	Age.	Sex.	Place where the Accident occurred.	Position of Injuries.	Nature and Number.	Bitten by	Date bitten.	Dates of Treatment.	Date of Death.	Place of Death.
8517	Mohamed Abdel Al ...	10	M.	Kafr el Hag Omar, Faqûs, Sharqîya.	Right cheek.	Severely.	Dog. Diagnosis positive.	Feb. 21.	Feb. 22-March 14.	April 6:— 43 days after the bite. 22 " " treatment.	His residence.
8778	Zenab Ibrahim ...	4	F.	Old Cairo.	Right cheek.	1 severe.	Dog. Diagnosis impossible.	May 16.	May 19-June 8.	July 1:— 35 days after the bite. 22 " " treatment.	"
8982	Abdel Latif Sayed ...	20	M.	Sahragt el Kobra, Mit Ghamr, Daqahliya.	Right and left cheeks.	Severe.	Wolf. Diagnosis suspect.	July 29.	July 31-Aug. 20.	September 6:— 38 days after the bite. 16 " " treatment.	"
8705	Ali Sayed Awad ...	12	M.	Badâri Bandar, Asyût.	Left forearm.	3 severe.	Dog. Diagnosis impossible.	April 26.	April 29-May 19.	September 24:— 150 days after the bite. 127 " " treatment.	Qasr el 'Aini Hospital.
9109	Fatma Sid Ahmed ...	5	F.	Maushat Sabri, Quweisna, Minûfiya.	Left cheek.	1 very severe.	Dog. Diagnosis impossible.	Sept. 8.	Sept. 9-29.	Jan. 29, 1919:— 142 days after the bite. 121 " " treatment.	Her residence.

TABLE LI.—RESULTS OF ANTIRABIC TREATMENT IN CAIRO DURING 1918.

	INJURIES ON THE HEAD.			INJURIES ON NAKED SKIN (Head excepted).			INJURIES THROUGH CLOTHING.			TOTALS.		
	Treated.	Died.	Mortality per Cent.	Treated.	Died.	Mortality per Cent.	Treated.	Died.	Mortality per Cent.	Treated.	Died.	Mortality per Cent.
Class A	22	1	4·5	51	0	0·9	36	0	0·0	109	1	0·9
„ B	2	0	0·0	34	0	0·0	21	0	0·0	87	0	0·0
„ C	72	3	4·1	286	1	0·4	235	0	0·0	593	4	0·6
	96	4	4·1	371	1	0·3	292	0	0·0	759	5	0·6

Class A.—The animal causing the bite was proved to be rabid by the development of rabies in animals bitten, or by experimental inoculation.

Class B.—The animal causing the bite was declared to be rabid by a veterinary surgeon.

Class C.—The animal causing the bite was suspected of rabies.

VI.—REPORT ON MEDICAL COMMISSIONS.

1.—CENTRAL MEDICAL COMMISSION.

During 1918, 8,430 medical certificates were issued by the Central Medical Commission. This shows an increase of 1,657 as compared with 1917.

Out of this total, 2,738 employees were examined for sick leaves, of which 217 were not granted sick leave. The attached table shows these figures in detail.

2,022 applicants have been examined for retirement from service on grounds of physical unfitness; 166 employees were pronounced fit for duty.

110 employees were invalided out of the service on account of bilharziasis and its sequelæ.

3,582 candidates were examined for admission to service. Out of these, 2,309 were rejected on account of defective vision, diseases of urinary, respiratory, circulatory systems, and other miscellaneous diseases.

The number of medical certificates issued by the Central Medical Commission during the last five years was as follows :—

1914	3,776
1915	4,682
1916	5,033
1917	6,773
1918	8,430

2.—PROVINCIAL MEDICAL COMMISSIONS.

As will be seen from the attached table, 10,116 medical certificates were issued by the Provincial Medical Commissions during 1918.

This gives an increase of 1,343 as compared with last year.

The agreement made between the Central Medical Commission and the Ministry of the Interior, whereby candidates for Nizâmi Ghafirs should be examined by District Medical Officers instead of the Provincial Medical Commissions, was put into force from June 1918.

The following figures show the number of ghafirs examined during the last seven months of 1918, *i.e.* since the Markaz Medical Officers began to furnish the Central Medical Commission with these figures :—

Month.	For Admission.	For Extension of Service.
June	1,085	578
July	978	595
August	1,032	146
September	816	720
October	830	644
November	794	34
December	983	345

TABLE LII.—ANNUAL RETURN OF MEDICAL EXAMINATIONS MADE BY THE CENTRAL MEDICAL COMMISSION DURING THE YEAR 1918.

MONTH.	OBJECT OF MEDICAL EXAMINATION.					TOTAL.	CAUSES OF REJECTION OF CANDIDATES APPLYING FOR ENTRY TO SERVICE.							TOTAL.
	NUMBER OF CASES.						DISEASES OF							
	For Admission to Service.	For Sick Leave.	For Invaliding from Service.	For Determination of Age.	Other Examinations if any.		Defective Vision.	Urinary System.	Respiratory System.	Circulatory System.	Nervous System.	Digestive System.	Other Miscellaneous Diseases.	
January ...	212	133	190	4	1	540	53	16	—	8	—	—	5	82
February ...	228	120	187	10	6	551	63	16	—	9	1	—	1	90
March... ..	461	147	135	7	2	752	112	33	4	23	—	—	4	176
April	357	188	223	4	1	773	99	46	1	14	—	—	5	165
May	254	176	186	2	3	621	88	25	3	10	—	—	2	128
June	245	206	188	7	2	648	73	20	2	14	—	—	5	114
July	252	228	135	4	3	622	80	24	1	12	—	—	2	119
August	313	239	171	2	7	732	104	29	2	9	—	—	—	144
September ...	392	237	117	1	2	749	114	48	—	24	—	—	1	187
October	357	245	188	6	3	799	112	42	—	15	—	—	2	171
November ...	268	421	155	4	3	851	93	17	—	11	—	—	3	124
December ...	243	398	147	3	1	792	69	27	1	13	—	—	5	115
TOTAL	3,582	2,738	2,022	54	34	8,430	1,060	343	14	162	1	—	35	1,615

TABLE LIII.—SICK LEAVE AND INVALIDING.

MONTH.	SICK LEAVES.					INVALIDING.				
	GRANTED.		REFUSED.		TOTAL.	VIDES CERTIFICATES.		BY CENT. MED. COM.		TOTAL.
	Vide Certificates approved.	By C. M. C.	Vide Certificates	By C. M. C.		Approved.	Disapproved.	Unfit.	Fit for Duty.	
January	59	59	—	15	133	159	2	21	8	190
February	51	62	—	7	120	158	—	25	4	187
March	68	67	—	12	147	99	5	24	7	135
April	99	78	—	11	188	168	4	38	13	223
May... ..	81	78	2	15	176	152	3	23	8	186
June	118	79	—	9	206	136	5	28	19	188
July... ..	109	96	—	23	228	103	4	18	10	135
August	89	117	—	33	239	121	9	36	5	171
September ...	87	132	1	17	237	84	3	22	8	117
October	88	129	9	19	245	137	8	29	14	188
November ...	165	243	—	13	421	124	1	20	10	155
December ...	206	161	—	31	398	98	7	33	9	147
Total	1,220	1,301	12	205	2,738	1,539	51	317	115	2,022

TABLE LIV.—ANNUAL RETURN OF MEDICAL EXAMINATIONS MADE BY THE CENTRAL AND PROVINCIAL MEDICAL COMMISSIONS.

COMMISSIONS.	OBJECT OF MEDICAL EXAMINATION.						TOTAL	CAUSES OF REJECTION OF CANDIDATES APPLYING FOR SERVICE.							TOTAL.
	NUMBER OF CASES.							DISEASES OF							
	For Admission to Service.	For Sick Leave.		For Invaliding from Service.	For Determination of Age.	Other Examinations if any.		Defective Vision.	Urinary System.	Respira- tory System.	Circula- tory System.	Nervous System.	Digestive System.	Other Miscella- neous Diseases.	
		Granted.	Refused.													Invalidated.	Fit for Duty
Central Medical Com.	3,582	2,738	217	2,022	166	54	8,430	1,060	343	14	162	1	—	35	1,615
Alexandria...	557	576	37	312	84	30	1,491	74	7	—	1	—	—	2	84
Suez ...	15	72	12	54	16	2	147	6	1	—	1	—	—	—	8
Port Said ...	85	120	3	43	9	2	250	17	—	—	—	—	—	3	20
Damietta ...	10	36	2	28	8	8	82	3	—	—	—	—	—	—	3
Bebeira ...	123	407	37	180	48	2	713	40	8	—	—	—	—	9	57
Gharbiya ...	142	637	28	321	86	61	1,161	22	1	1	1	—	—	1	26
Minûfiya ...	147	172	10	129	51	3	451	26	16	—	—	—	—	5	47
Daqahliya ...	180	495	37	614	257	12	1,318	48	18	—	3	—	—	8	77
Sharqiya ...	142	400	23	250	54	7	813	37	5	2	4	2	—	2	52
Qalyûbiya ...	100	127	22	64	29	1	293	39	7	1	4	—	—	1	52
Giza ...	104	254	37	68	33	10	436	35	1	—	2	—	—	1	39
Faiyûm ...	139	188	5	52	28	9	388	51	10	2	—	—	—	—	63
Beni Suef ...	44	167	5	54	25	8	277	10	5	—	—	—	—	—	15
Minya...	242	228	11	188	73	2	661	76	30	—	—	—	—	2	108
Asyût ...	148	301	29	197	95	11	257	15	5	1	1	—	—	3	25
Girga ...	81	198	6	188	64	3	470	5	—	—	2	—	—	—	7
Qena ...	117	111	4	80	17	1	309	8	—	—	—	—	—	—	8
Aswân...	26	87	—	78	37	5	199	—	1	—	2	—	—	—	3
TOTAL ...	5,984	7,314	525	4,922	1,180	231	18,546	1,572	458	21	183	3	—	72	2,309

TABLE LV.—GHAFFIRS.

MONTHS.	NIZAMI GHAFFIRS ON ADMISSION TO SERVICE.								GHAFFIRS FOR EXTENSION OF THEIR VOLUNTARY SERVICE.							
	Total Number of Ghaffirs examined during the Month.	Number of Ghaffirs pronounced Fit.	Number of Ghaffirs pronounced Unfit.	Causes of Unfitness.					Total Number of Ghaffirs examined during the Month.	Number of Ghaffirs pronounced Fit.	Number of Ghaffirs pronounced Unfit.	Causes of Unfitness.				
				Def. Vision.	Urinary System.	Respiratory System.	Circulatory System.	Other Diseases.				Def. Vision.	Urinary System.	Respiratory System.	Circulatory System.	Other Diseases.
1918.																
June	1,085	829	256	243	4	—	2	7	578	523	55	49	2	—	3	1
July	978	723	255	221	10	—	12	12	595	488	107	94	8	1	—	4
August	1,032	728	304	273	17	—	4	10	146	127	19	16	—	—	—	3
September ...	816	594	222	188	12	5	7	10	720	591	129	112	4	2	11	—
October	830	653	177	165	4	—	5	3	644	532	112	101	3	—	3	5
November ...	794	573	221	208	4	—	3	6	34	25	9	9	—	—	—	—
December ...	983	710	273	258	4	—	5	6	345	291	54	51	1	—	1	1
TOTAL ...	6,518	4,810	1,708	1,556	55	5	38	54	3,062	2,577	485	432	18	3	18	14

VII.—REPORT ON THE INSPECTORATE OF PHARMACIES.

There were 371 pharmacies existing in the whole of Egypt at the end of the year, and 329 of them have been inspected. About two-thirds gave satisfaction from a legal point of view and by their general condition, and in the remainder certain irregularities were found. In the case of minor and first offences, the proprietors of the pharmacies were accorded a certain time in which to remedy the fault, but in cases where the offence was serious or repeated, *procès-verbaux* of contravention were drawn up against the offenders. (See table.)

The shortage of pharmacists and assistant pharmacists mentioned in last year's report has become very acute. Only five pharmacists have been authorized and three assistants. This shortage will doubtless continue until communications between Egypt and other countries become normal. It has been found almost impossible to recruit pharmacists for the Government Service, as the salary allowed to them compares unfavourably with that which may be earned in an ordinary pharmacy. Since the modification of Article 5 of Law No. 20, 1911 (during August 1918), by which every pharmacy is allowed to employ one apprentice, eighty-eight apprentice assistant pharmacists have registered at the School of Pharmacy, and nineteen student pharmacists. The benefit of this, however, will not be felt until three years have elapsed, as these apprentices are obliged to serve in a pharmacy for that period before they are allowed to enter for the examination. As a result of this shortage of pharmacists, certain doctors—proprietors of pharmacies—have been obliged to transform their pharmacies into simple drug stores and clinics and to prepare medicines for their own patients in their clinics. This transformation is only on the surface, and they usually continue to prepare and sell medicines for outside clients, the dispensing being done by an unqualified person. Doctors' clinics being exempt from inspection, the Inspectorate is powerless to stop this proceeding.

The traffic in narcotic and stimulating drugs still continues on a large scale, not so much by pharmacists as by private persons, over whom the Inspectorate has no control. Twelve *procès verbaux* have been drawn up against illegal traffickers in cocaine and morphine. Seven of these led to convictions, four were filed, and one resulted in acquittal. This abuse can only be remedied by the promulgation of a new law whereby the penalties will be such as to render the traffic both dangerous and unprofitable.

The illegal trade in opium has given rise to thirty-two *procès verbaux*, which resulted in twenty convictions, seven filed or acquitted, and five pending. Now that the cultivation of the opium poppy has been prohibited until further orders, the difficulties experienced in controlling this drug will be greatly reduced.

The War Trade Department has referred all applications for permission to export drugs to this Department, and the Inspectorate has given its opinion as to the advisability of allowing the export of the same. This has been granted in cases where no local shortage existed and also when the drugs were destined for hospitals and charities.

The proportion of pharmacies owned by unqualified persons still remains very high, being 47 per cent of the total. This is regrettable, as experience shows that, as a rule, pharmacies owned by unqualified persons are administered very irregularly. The proprietors, being ignorant of the law, often order their managers to commit offences against it, and the manager is obliged to risk a contravention or else lose his position.

Early in the year it was discovered that certain consignments of Epsom salts which were coming into the country contained a proportion of arsenic far superior to that allowed by the British Pharmacopœia. Samples were taken, therefore, from all quantities arriving at the Customs and also from stocks existing in the country. Out of 4,490 samples analysed, 2,527 proved to be unfit for medicinal use. Stocks existing in the country were confiscated and destroyed, and import was refused to all consignments which did not fulfil the necessary conditions.

Fifty-seven samples of medicines have been purchased from various pharmacies during inspection. On analysis twenty-three were found to be genuine and thirty-four proved to be under strength, adulterated or of bad quality. In nine cases warnings were sent to the vendors, and nineteen *procès verbaux* of contravention were drawn up against the others. These resulted in fourteen convictions, two acquittals, and three pending.

TABLE LVI.—STATISTICS CONCERNING PHARMACIES AND AUTHORIZED POISON DEALERS.

	CAIRO.		ALEXANDRIA.		PROVINCES.		TOTAL.	
	Pharmacies owned by		Pharmacies owned by		Pharmacies owned by		Pharmacies owned by	
	Qualified Pharmacists.	Unqualified Persons.	Qualified Pharmacists.	Unqualified Persons.	Qualified Pharmacists.	Unqualified Persons.	Qualified Pharmacists.	Unqualified Persons.
<i>Pharmacies :—</i>								
Existing at end of year... ..	84	67	43	36	67	74	194	177
Inspected and found satisfactory... ..	50	38	20	18	41	45	111	101
" " " unsatisfactory... ..	1	2	—	1	2	—	3	3
" " " mediocre... ..	29	22	11	7	13	29	53	58
Opened during the year... ..	2	5	1	4	7	12	10	21
Closed... ..	3	5	3	1	5	12	11	18
<i>Procès-verbaux</i> drawn up for offences against the Pharmacy Law and Law No. 20 of 1911... ..	6	21	10	9	15	20	31	50
Sentenced... ..	3	16	6	7	15	16	24	39
Acquitted... ..	1	1	3	2	—	3	4	6
Filed... ..	1	4	1	—	—	1	2	5
Pending... ..	1	—	—	—	—	—	1	—
	CAIRO.		ALEXANDRIA.		PROVINCES.		TOTAL.	
<i>Authorised Poison Dealers :—</i>								
Number of authorisations granted up to the end of 1918, comprising... ..	83		44		42		169	
* Tableau I Wholesale... ..	23		14		11		48	
" II... ..	20		13		6		39	
" II Retail... ..	20		13		14		47	
Provisional for export of opium... ..	9		2		5		16	
Provisional for export of poisonous plants grown in the country... ..	2		2		2		6	
<i>Procès-verbaux</i> drawn up against druggists and private persons other than pharmacists or proprietors of pharmacies... ..	29		9		39		77	
Sentenced... ..	17		6		29		52	
Acquitted or filed... ..	4		1		8		13	
Pending... ..	8		2		2		12	

* In cases where a person is authorized to deal in both Tables, I and II, only one authorization is granted.

VIII.—REPORT ON THE STORES BRANCH.

EXPENDITURE.

The following is a comparison of the budgetary estimates for the years 1917, 1918, and 1919-1920 :—

	1917	1918	1919-20
	L.E.	L.E.	L.E.
Equipment... ..	43,460	32,481	79,121
Instruments	7,565	10,743	9,459
Drugs and special chemicals	20,425	19,162	33,684
Epidemic	24,397	35,233	70,667
Clothing	929	425	2,786
Repairs	4,030	4,326	5,000
Transport	200	2,100	3,000
Forage	639	888	1,267
TOTAL	101,645	106,358	204,984

	1917	1918	1919-20
	L.E.	L.E.	L.E.
Stores bought locally	54,000	9,015	* 8,570
„ abroad	34,000	88,800	† 63,530
2,100 orders have been dealt with.			‡ 71,530

BUDGET.

The estimates for 1919 are, roughly, double those for 1918, namely, L.E. 204,984, against L.E. 106,358.

The increase is due partly to a rise in prices and partly to larger quantities of stores ; this is most marked in the expenditure on epidemic stores.

It is therefore evident that the supply of stores is not yet meeting the Department's requirements. All sections are suffering in this respect, but as the shortage for hospitals alone amounts to, roughly, L.E. 80,000, assistance from the Treasury is highly improbable. A gradual increase based on the increasing issues of stores is the only means of relief ; the method is very gradual and much behind the pace of development.

In connection with the latter point, the Central Stores is now faced with a very serious obstacle. The volume of supplies has outgrown storage accommodation to such a degree that even the present stock cannot be properly stored. The accommodation requires to be doubled.

Epidemic Section.—The increase of 100 per cent under this heading does not indicate any change in the original scheme for fixing store establishments in the provinces. The basis is provision to treat 5,700 patients, plus an emergency reserve for 1,000 patients. The equipment provided to meet the above needs is by no means excessive, neither in character or quantity ; increased expenditure in the future is therefore inevitable.

Frontier Districts Administration—Stores to the amount of L.E. 7,030 are included in the 1919 estimates.

* Purchased by limited tenders.

† Purchased by contracts (including L.E. 34,131 for tentage),

‡ L.E. 71,530 represents the estimated cost of stores ordered in London. The actual cost will exceed the estimate by at least 30 per cent.

CONTRACTS.

	1916	1917	1918
Number of contracts made during the year	100	115	146
	L.E.	L.E.	L.E.
Total value of contracts of the Department, including rations, etc.	91,124	146,992	129,905(*)
Value of contracts for Central Stores :—			
Equipment	22,571	44,930	34,378(†)
Drugs	16,125	11,280	— (‡)

The following is a comparative statement of contracts placed by the Department in the years 1916-1917 and 1918.

TABLE LVII.—COMPARATIVE STATEMENT OF CONTRACTS AS PLACED BY THE DEPARTMENT IN 1916, 1917, AND 1918-1919.

NATURE OF CONTRACT.	RATES.						TOTAL AMOUNTS.				
	1916		1917		1918-19		1916	1917		1918-19.	
	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	L.E.	M.	L.E.	
Petroleum	—		—		—		595	351	000	463	
Crude oil	—		—		—		172	290	000	922	
Milk condensed per kilo.	0	045	0	048	0	050½	540	684	000	872	
Meat for Qasr el 'Aini Hospital:—											
Mutton „	0	055	0	080	0	120	3,566	2,900	000	5,444	
Beef „	0	050	0	062	0	100					
Meat for Fever Hospital:—											
Mutton „	0	055	0	090	0	120	1,615	5,170	000	6,262	
Beef „	0	054	0	062	0	100					
Native bread:—											
Qasr el 'Aini Hospital „	0	009½	0	022	0	026½	1,615	5,170	000	6,262	
Fever Hospital „	0	009½	0	023¾	0	026½					
<i>Bersim</i> (Scavenging and Water- ing Service) per qantâr	0	035	0	035	0	042	906	907	000	1,102	
Straw bedding per ton	1	100	1	280	1	490	396	350	000	581	
<i>Tibn</i> (from State Domains) „	2	380	2	380	3	050	1,808	1,933	000	3,100	
Rabbits for Antirabic Institute each	0	060	0	135	0	135	108	148	000	148	
Rations for Cairo hospitals	—		—		—		13,908	9,700	000	16,732	
Rations for provincial hospitals	—		—		—		32,492	33,590	000	51,463	
Alcohol per kilo	0	032½	0	032½	0	032½	1,405	1,300	000	1,463	
Ice per block	0	036	0	018	0	072	507	765	000	1,510	
Equipment, etc.	—		—		—		22,571	44,930	000	15,025	
Drugs, general	—		—		—		15,604	24,340	000	§	
Drugs, local adjudication	—		—		—		520	521	000	**	
Coal and cotton seed cakes... ..	—		—		—		2,212	5,080	000	7,468	
Disinfecting drums	—		—		—		—	170	000	1,590	
Wood	—		—		—		—	2,283	000	1,435	
Tents	—		—		—		—	5,807	000	34,131	

(*) Not including supplies obtained through Sir Arthur Webb in London.

(†) The greatest part of the equipment on the budget for the year 1918 has been obtained through Sir Arthur Webb, and is therefore not included in this amount.

(‡) Drugs, estimated in the budget at L.E. 17,000 were all ordered through Sir Arthur Webb.

§ These contracts represent only the equipment put up to adjudication locally. The most important part of the equipment on the budget has been purchased through Sir Arthur Webb in London.

** All the drugs (with the exception of L.E. 2,000) have been ordered through Sir Arthur Webb in London. The estimated cost of these drugs as per Budget is L.E. 17,000.

A comparison of prices of some of the chief items for the year 1916-1917 and 1918 is given hereunder :—

GENERAL EQUIPMENT.

TABLE LVIII.—COMPARISON OF PRICES OF MAIN ITEMS FOR THE YEARS 1916, 1917 AND 1918.

Item No.	DESCRIPTION.	Rate in Milliemes.		
		1916	1917	1918
80	Bedsteads, 2nd class	4,600	4,350	4,350
104	Blankets, white woollen	850	622	1,116
107	„ brown... ..	510	900	702
133	Boots, shawishes... ..	575	620	1,050
228	Cases for mattresses	550	440	1,483
416	Drawers, 2nd class	53	165	184
468	Gallabias, large	182	265	884
495	Gowns, hospital	1,800	1,100	1,477
547	Jackets, calico	82	096	308
569	Jerseys, blue	350	375	533
706	Mattresses, felt	440	304	360
866	Pots, copper... .. per kilo.	—	593	593
981	Sheets, 2nd class	490	485	936
984	„ draw, thick	290	290	241
991	Shirts	75	082	250
1011	Shoes, tamurgis	320	250	345
1037	Slippers	200	170	235
1190	Towels, white	130	130	180
1594	Material No. 3 per metre	24.5	077	084
1608	„ No. 17, bed ticking	150	102	237
1770	Soap, washing per kilo.	49	042	065

DRUGS.

TABLE LIX.—COMPARISON OF PRICES OF DRUGS.

DESCRIPTION.	Price in Milliemes.		
	1916	1917	1918
Aspirin per kilo.	6,000	2,463½	3,150
Acid, boric	043	067	128
Acid, carbolic	280	280	280
Alcohol	032½	032½	032½
Bismuth carbonate	1,950	1,597	1,954
Copper sulphate	071	071	071
Glycerine	148	115	183
Iodine, pure	2,193	2,223	2,662
Magnesium sulphate	020	029	032
Castor oil	103	153	170
Turpentine	079	158	277
Opium	5,000	5,831	9,032
Potassium iodide	2,240	1,680	1,849
Potassium bromide	2,441	985	1,570
Quinine sulphate	3,952	5,331	7,628
Sodium bicarbonate	011	016	030
Vaseline	100	107	284
Sodium salicylate	2,490	1,133	1,082
Cod liver oil	167	246	360
Iodoform	2,405	2,655	4,980

Preparations to the value of L.E. 5,840 were made in the Drug Store.

		L E.
1916	... ..	4,933
1917	... ..	5,504
1918	... ..	5,840

Medicines to the value of L.E. 3,215 were sold in the various dispensaries of the Department, as against L.E. 3,195 for 1917.

STORE TRANSACTIONS.

The following statistics cover the general work of the storekeeping and accounting offices for the Central Stores of the Department.

TABLE LX.—STORE TRANSACTIONS.

	REQUISITIONS VOUCHERS.			
	Issued.		Stores received at Headquarters.	
	1917	1918	1917	1918.
Equipment	10,053	9,349	3,226	3,240
Drugs	3,830	4,371	507	653
Bûlâq Store	740	1,606	138	328
Surgical instruments	2,149	2,494	372	333
Kohna Store	4,922	4,972	2,712	2,610
Forage	172	213	172	253
Hygienic Institute	27	14	27	14
TOTAL	21,893	23,019	7,154	7,431

	1917	1918
Number of charges of permanent stores in the Department ...	255	255
Value of stores issued on payment :—	L.E.	L.E.
From General Stores	16,050	16,974
From Epidemic Store	425	—
Value of stocks on April 1, 1918 :—		
Instrument Store	5,198	8,909
Drug Store... ..	27,784	39,038
Equipment Store	40,875	38,099
Kohna Store	271	1,024
Bûlâq Auxiliary Store	8,611	25,607
	<u>82,739</u>	<u>112,677</u>

ORGANIZATION.

GENERAL STORES.

Stores.—(Thirteen storekeepers, fifty-one storemen.)

Equipment Permanent Store.	Surgical Instrument Store.
Equipment Consumable Store.	Kohna Store.
Drugs Store.	Auxiliary Store.

Pharmacists.—Two.

Ledger Section.—Eleven clerks.

Permanent Charge Section.—Nine clerks.

Supplies Section.—Seven clerks.

Registration and Archives Office.—Eight clerks.

Workshops.—One chief foreman, one clerk.

Correspondence and Personnel office.—Two clerks.

STAFF.

The following increase of staff has been authorized :—

[illegible]

The staff is now as follows :—

PENSIONABLE STAFF.

Pensionable Staff:—

Director of Stores	...	...	...	...	...	...	...	1
Pharmacist, 2nd class	...	...	...	...	...	...	...	1
Pharmacists, 4th class	...	...	...	...	...	...	...	2
Assistant Pharmacists	...	...	...	...	...	...	...	2
Sous-Chefs de Bureau	...	...	...	...	...	...	...	2
Employés, 1st class	...	...	...	...	...	...	...	2
Employé, 2nd class	...	...	...	...	...	...	...	1
Employés, 3rd class	...	...	...	...	...	...	...	3
Chief Storekeeper	...	...	...	...	...	...	...	1
Storekeeper, 1st class	...	...	...	...	...	...	...	1
„ 2nd class	...	...	...	...	...	...	...	1
Storekeepers, 3rd class	...	...	...	...	...	...	...	4
Employés, 4th class	...	...	...	...	...	...	...	20
Storekeepers, 4th class	...	...	...	...	...	...	...	7

WORKSHOPS.

Clerk of Works	...	...	...	...	...	...	...	...	1	
									1	

Temporary Staff :—

Chief Foreman	...	...	...	...	...	...	...	...	...	...	1
Employés, temporary	...	...	...	...	...	...	...	...	...	...	12
										<hr/>	13

Hors Cadre Staff :—

Workmen, instruments' workshop	...	...	...	...	...	...	7
Carpenters' workshop	...	...	...	...	...	...	19
Blacksmiths'	„	...	...	...	...	...	14
Tentmakers'	„	...	...	...	...	...	5
Tinsmiths'	„	...	...	...	...	...	4
Tailors'	„	...	...	...	...	...	6
Painters'	„	...	...	...	...	...	12
Dispensary servants	...	...	...	...	...	...	20
Drivers and syces	...	...	...	...	...	...	17
Storemen	...	...	...	...	...	...	51
							217
							<hr/> Total 315 <hr/>

WORKSHOPS.

INSTRUMENT-REPAIRING SHOP.

Ophthalmic Section.

Stethoscopes	22	Discs, lead	77,400
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General Instrument Repairs.

Potain's aspirators	17	Bandage knives	931
Electric batteries	221	Mincing knives	182
Catheters	...	...	...	...	35	Lithotrites	...	...	...	...	2
Scoops	...	...	...	...	19	Centrifuges	...	...	...	...	3
Probes and directors	...	...	...	...	23	Bandage machine...	...	...	...	...	1
Artery forceps	...	...	...	...	219	Stomach pump	...	...	...	...	1
Dressing forceps	...	...	...	...	221	Hammers	...	...	...	...	28
Bone forceps	...	...	...	...	60	Sand baths	...	...	...	...	2
Eye forceps	...	...	...	...	26	Water pillows	...	...	...	...	16
Midwifery forceps	...	...	...	...	10	Distilling apparatus	...	...	...	...	1
Tooth forceps	...	...	...	...	1	Somnoform apparatus...	...	...	...	...	5
Mouth gags	...	...	...	...	5	Bone drill	...	...	...	...	1
Hooks	...	...	...	...	9	Extension apparatus	...	...	...	...	3
Amputation knives	...	...	...	...	73	Sponge holder	...	...	...	...	3
Bistouries	...	...	...	...	71	Measure, tape	...	...	...	...	1
Cartilage knives	...	...	...	...	101	Thermo-cauteries	...	...	...	...	8
Scalpels	...	...	...	...	1,938	Tracheotomy tubes	...	...	...	...	3
Eye scalpels	...	...	...	...	1,942	Hair clipper	...	...	...	...	1
P. M. scalpels	...	...	...	...	98	Primus stove, 1 burner	...	...	...	...	273
Lancets	...	...	...	...	63	„ 2 burners	...	...	...	...	1
Hypodermic needles	...	...	...	...	1,742	„ 4 „	...	...	...	...	5
Razors	...	...	...	...	269	„ 6 „	...	...	...	...	3
Retractors	...	...	...	...	7	Spirit monopole lamp	...	...	...	...	1
Amputation saws	...	...	...	...	34	Table spirit lamps	...	...	...	...	3
Finger saws	...	...	...	...	37	Electric pocket lamps	...	...	...	...	4
P. M. saws	...	...	...	...	33	Water baths	...	...	...	...	2
Scissors, curved	...	...	...	...	302	Chloroform droppers	...	...	...	...	42
Scissors, straight	...	...	...	...	1,162	Guillotines	...	...	...	...	13
Scissors, eye	...	...	...	...	160	Needles, surgical	...	...	...	...	190
Scissors, P. M.	...	...	...	...	51	Nose speculum	...	...	...	...	1
Speculas, vaginal...	...	...	...	...	13	Ear speculum	...	...	...	...	1
Eye speculum	...	...	...	...	24	Sterilizer, electric	...	...	...	...	1
Autoclaves	...	...	...	...	19	Machine, pills	...	...	...	...	1
Instruments, sterilizers	...	...	...	...	11	Platinum loops	...	...	...	...	2
Water sterilizer	...	...	...	...	9	Ice bag	...	...	...	...	1
Dressing drum	...	...	...	...	30	Back rest	...	...	...	...	1
Brass syringes	...	...	...	...	12	Arm splints	...	...	...	...	2
Hypodermic syringes	...	...	...	...	71	Rack for scalpels	...	...	...	...	1
Lachrymal syringes	...	...	...	...	3	Knife, second-class	...	...	...	...	9
Trocars	...	...	...	...	31						

BLACKSMITHS' SHOP.

Examination tables	...	...	...	...	20	Towel stands	...	...	...	...	10
Trolleys	...	...	...	...	2	Tisht stands	...	...	...	...	3
Heurika table	...	...	...	...	14	Operation chairs	...	...	...	...	15
Stands, small	...	...	...	...	2	Instrument stands	...	...	...	...	24
Brackets for stretchers	...	...	...	...	2						

Repairs.

Ambulance, fourth-class	...	...	...	...	28	Pump handle	...	...	...	...	1
Mats, door	...	...	...	...	21	Dressing tables	...	...	...	...	6
Operation chairs	...	...	...	...	12	Ironing stoves	...	...	...	...	2
Bedsteads	...	...	...	...	18	Splints	...	...	...	...	15
Rakes, garden	...	...	...	...	31	Zîr supports	...	...	...	...	18
Iron rings	...	...	...	...	34	Axle pins for carts	...	...	...	...	32

Repairs (continued).

Back rests	11	Merlin chairs...	12
Examination tables	6	Bags for paper	6
Bedsteads, first-class	25	Keys and locks	254
Clips for files	150	Pumps	2
Copying presses	4	Safe for money	1
Ophthalmic <i>shamsias</i>	3	Meat-mincing machines	15
Dressing box... ..	1	Hand wheelbarrows	13
Brackets	129	Traps	16
Keys	6	Wheels, barrows	8
Tables, iron, folding	67	Pincers, carpenters'	6
Boilers for hot water	4	Hinges	68
Drum	1	Perforator	1
Hooks	42	Carts for water	12
Rods, iron	14	Machines for grinding coffee	3
Barrels	11	<i>Tisht</i> supports	58
Stretchers	4	Shears, garden	3
Filters	16	Axes, iron	8
Wheelbarrows	10	Bedsteads, second-class	182
Travelling bedsteads	52	Sterilizers	2
Motor-cycles	4		

CARPENTERS' SHOP.

New Work.

Tables, various	10	Splints	251
Chests, ice, vaccination	64	Packing cases	837
Baskets, paper	9	Plugs, wooden	200
Cupboards, various, small	30	Boards, various	143
Shelves, various	26	Baskets, waste-paper	40
Sofas	7	Wooden stands	207
Poles, tent	221	Crutches	381

Repairs.

Tables, various	47	Boxes	14
Stretchers	33	Carts	14
Choppers	13	Trays, coffee	6
Chairs	346	Poles, tent	91
Crutches	3	Boards, various	27
Filters	5	Ladders, step	22
Crates	1,774	Barrels	218
Cupboards	34	Shelves	7
Chests, ice	27	Baskets, waste-paper	14
Screens	18	Doors	1
Bedsteads	120	Floor, wooden, tent	14

TINSMITHS' SHOP.

New Work.

Covers, tin, for jars	150	Strainers, tin, for soup	24
Meshes for wire mattresses... ..	5,500	Pots, zinc	21
Cutting panes of glass	371	Irrigators, zinc	110
Basket, wire, for tubes	1		

Repairs.

Vermorels	111	Wire, tying, 1 kilo.	198
Formaline apparatus	38	Lamps, hospital pattern	112
Nozzles	79	Lamps, table, paraffin... ..	11
Water cans	110	Candlesticks	40
Pails, i. g.	39	Soldering cyllin drums	294
Cans, tin, spirit	31	Soldering tins	893
Covers, latrine pail	30	Fitting glass panes	294
Ice chests	30	Pannikin trays	11
Pans, copper	4	Coffee cans	4
Boards, tin, diet	19	Strainers, tin, soup	17
Cans, milk	504	Zinc baths	72
Pots, zinc	10, 113	Egg beaters	5
Traps, rat	190		

PAINTERS' SHOP.

Barrels	221	Ladders	20
Notice boards	64	Boxes	404
Roofs	3	Stands	234
Stands	50	Sterilizers	2
Carts	25	Tent floors	270
Paper racks	58	Tables	543
Stove	1	Seats	4
Covers	567	Bag... ..	1
Chairs'	599	Doors	3
Weighing machines	8	Basins	5
Forms	33	Boards	148
Ice chests	62	Blackboard	1
Shelves	12	Poles	6
Copying presses	9	Baths	2
Cupboards	209	Trays	14
Mat	1	Sofas	4
Screens	32	Back rests	3
Pails	12	Safe	1
Bedsteads	712	Filters	8
Canisters	20	Stretchers	3
Name boards	136	Splints	11
Lanterns	54	Lettering, D.P.H.	1,449
Desks	22	Meat safes	4

Painting distilling room.
Painting steam engine.
Painting doors of Hôd el Marsûd.
Painting surgical instruments store.
Painting coal store.
Lettering Gedda Mamuria.
Lettering bedsteads and doors of Qasr el 'Aini Hospital.
Painting tables and bedsteads of Suez Hospital.
Painting tables and bedsteads of Benha Hospital.
Painting furniture of Shibin el Kôm Hospital.
Painting furniture of Sister House, Qasr el 'Aini Hospital.
Painting furniture of Ophthalmic Hospital, Zagazig.

TENTMAKERS' SHOP.

New Work.

Mattresses, cotton	79	Covers, canvas, for carts	6
Pillows, cotton	155	Tents, two poles	36
Mattres cases	42	Shamsias, two poles	36
Pillows, sofa	12	Tents, second-class	2
Mattresses, sofa	6	Pillows, cotton, long	16
Valises, tent	2	Mats, fibre, door	4
Cover, canvas, for motors	1	Tents, one pole	9
Rags, canvas, for travelling beds	12	Curtains for window	9

Repairs.

Tents, second-class	23	Cushions, chair	27
Tents, one pole	69	Mattress cases	399
Shamsias, two poles	55	Mattresses, cotton	293
Shamsias, operation	2	Pillows, cotton	99
Latrines, screen	8	Bag for paper	1
Tents, stable	4	Pillows for operations	4
Tents, first class	6	Mattress for operations	1
Tents, three poles	18	Sofas	2
Chairs, canvas	71	Bottles, zinc, felt-covered	20
Bedstead, travelling	12	Mattresses, cotton	1,133
Stretchers, canvas	36	Pillows, cotton	1,395
Sacks, disinfecting	183	Pillows, sofa	10
Mats, fibre, door	2	Mattresses, sofa	5

TAILORS' SHOP.

New Work.

Overcoats, flannel	78	Shirts, men, large	1,060
Flags, hospital	35	Shirts, women, large	536
Cases, pillow, second-class	3,238	Armlets	272
Uniforms, blue flannel	150	Gowns, red	11
Uniforms, khaki	3	Suits, disinfecting	3
Shirts, babies'	18	Towels, operation	15
Towels, tamurgis	750	Drawers, second class	1,000
Gallabias, blue flannel	265	Gowns, blue	240
Trousers, bashtamurgis	31	Knife bags	4
Cases, pillow	23	Waistcoats, khaki	40
Belts, red, woollen	34	Curtains... ..	2
Cases, disinfecting	150	Gowns, red flannel	63
Veils, operation	208	Shirts, flannel, large	480
Towels, operation	20	Drawers, flannel, large	403
Towels, first-class	29	Waistcoats, large	103
Trousers, tamurgis	112	Mosquito nets	6

Repairs.

Cases, pillow	29	Trousers, shawishes	85
Towels, operation	500	Jackets, blue	75
Mattress cases	30	Jackets, khaki	75
Jackets, shawishes	85		

IX.—REPORT ON CAIRO SCAVENGING AND WATERING SERVICE.

STREET AREA.

Extension of area in 1918 amounted to 47,844 square metres, of which 44,044 square metres were macadam roads and 3,800 square metres lanes paved with stone setts, bringing the total area of public roads under charge of the Service, at the end of the year, to 3,224,590 square metres.

A statement of areas and extensions for the last three years is appended :—

YEAR.					Area.	Extension during Year.
					Square Metres.	Square Metres.
1916	...	...	...	...	3,133,351	12,272
1917	...	...	...	...	3,176,746	43,395
1918	...	...	...	...	3,224,590	47,844

Earth roads of the approximate area of 500,000 square metres (Tanzim figures) are included in the above figures. This area is scavenged as far as credits allow.

Work on Private Account.—In addition to the figures given above, the Service also operates on an area of 81,143 square metres of macadamized private roads, against payment, being no increase on the 1917 figure.

WATER CONSUMPTION.

TABLE LXI.—TABULAR STATEMENT OF NET CONSUMPTION FOR THE PAST THREE YEARS.

MONTH.					1916	1917	1918
					Cubic Metres.	Cubic Metres.	Cubic Metres.
January	...	...	...	...	18,300	15,606	25,047
February	...	...	...	...	18,608	31,666	25,595
March	...	...	...	...	39,577	50,888	36,819
April	...	...	...	...	67,387	63,587	60,472
May	...	...	...	...	73,301	64,007	74,070
June	...	...	...	...	85,497	71,295	81,075
July	...	...	...	...	78,868	77,580	85,177
August	...	...	...	...	74,965	73,123	81,698
September	...	...	...	...	71,477	66,872	66,492
October	...	...	...	...	50,641	52,064	61,154
November	...	...	...	...	33,885	39,016	39,383
December	...	...	...	...	27,303	25,529	35,011
TOTAL					639,809	631,233	671,993

Rolling Stock.—After deduction of condemned material, and inclusive of new material purchased, the strength of rolling stock, etc., on charge of the Service, was as below :—

	1916	1917	1918
Double water vans	80	80	82
Single water carts	89	94	95
Double dust vans	77	81	83
Single dust carts	203	213	211
Machine brushes	40	40	41
Trolley carts	13	13	13
Sewage carts	34	33	35
Hand carts	120	126	127
Dust bins	477	513	508
Steam pumps	1	3	3
Hand pumps	6	3	3

Comparative prices of new rolling stock for the last three years are shown hereunder :—

	1916		1917		1918	
	L.E.	M.	L.E.	M.	L.E.	M.
Single dust carts	22	100	24	377	34	748
Double dust vans	73	454	85	163	105	—
Single water carts	34	100	40	359	25	538*
Double water carts, cylindrical	98	450	157	595	156	676

Repairs were executed in Service workshops. New material was purchased from the Mechanical Department, Tura Prisons, and by adjudication.

Harness.—Made as usual at the Model Workshops. The prices were :—

	1916		1917		1918	
	L.E.	M.	L.E.	M.	L.E.	M.
Double harness	6	800	8	500	8	600
Single harness	5	200	5	200	7	500

Repairs were executed, as usual, in Service workshops.

TABULAR STATEMENT OF ANIMALS FOR THE LAST THREE YEARS.

	1916	1917	1918
Animals cast :—			
Mules	80	40	67
Horses	—	20	76
Donkeys... ..	2	1	1
	82	61	144
Animals purchased or obtained gratis from the Army :—			
Mules	73	13	31
Horses	—	32	125
Donkeys... ..	3	—	—
	76	45	156
Strength at end of year :—			
Mules	540	513	477
Horses	18	30	79
Donkeys... ..	14	13	12
	572	556	568

FORAGE.

Tibn.—Supplied as in the previous year from the Domains Administration.

Barley.—Was supplied by the Supplies Department, Egyptian Army, up to end of October 1918, but owing to the difficulty of obtaining this article the Chief Veterinary Inspector, Ministry of Interior, arranged to substitute beans, which were obtained from Asyût Province.

Bran.—Supplied from Tura Mills, Egyptian Army, as usual.

* A small donkey water cart built in S. & W.S. shops.

Straw.—Supplied by a contractor, after public adjudication.

Bersîm.—Supplied by a contractor, after public adjudication.

							PRICES.					
							1916		1917		1918	
							L.E.	M.	L.E.	M.	L.E.	M.
Barley	...	...	...	...	...	...	9	094	9	576	13	281
Beans	...	...	...	...	...	...		—		—	14	390
Bran...	...	...	...	...	...	...	5	910	6	261	6	261
<i>Tibn</i>...	...	...	...	...	...	...	2	380	2	380	3	461
Straw	...	...	...	...	...	...	1	100	1	280	1	490
<i>Bersîm</i>	...	...	...	...	...	...	0	027	0	035	0	042

per ton of 1,000 kilos.

per qantâr of 100 rotls.

Refuse Disposal.—There was no change in the method of disposal of this during 1918, and the refuse dumps were not increased in number.

The following are the details of the disposal of refuse in 1918, average daily output :—

NAME.	Single Dust Cart. 1 c.m. Capacity.	Double Dust Van. 2 c.ms. Capacity.
Madbah	110	66
Shanawâni	69	—
Gîza	9	42
Abbâsiya	102	39
Shubra	30	3
Imbâba	46	—
Matarîa	57	—
TOTAL	423	150

In addition, 158 single dust cart loads were delivered daily to fifty-nine native baths, against payment, and 30 tons of rubbish were daily burnt at the destructor.

Reckoning a cartload of 1 cubic metre as about one-third ton weight, the total daily output was in 1918 :—

Tipping	241 tons.
Native baths	53 „
Destructor	30 „
TOTAL	324 tons.

or, for the whole year, 118,260 tons.

TABULAR STATEMENT OF RUBBISH OUTPUT FOR THE LAST THREE YEARS.

	1916	1917	1918
	Tons.	Tons.	Tons.
Tipping	72,468	86,505	87,965
Native Baths	18,666	17,520	19,345
Destructor	10,980	10,950	10,950
TOTAL	102,114	114,975	118,260

At the beginning of 1918 the Department of Public Heath granted the concession for removal of street sweepings from the existing refuse dumps, for a period of ten years; the concessionnaire proposed to manufacture artificial fuel from the refuse, but up to the end of 1918 had not seriously begun this manufacture, confining himself merely to the sale of *sebâkh* from one of the old abandoned dumps. In consequence, the refuse dumps have become more and more congested, and the problem of refuse disposal more acute as the town extends.

Bicycles.—During 1918 no Scavenging and Watering Service bicycles were condemned, and no additional bicycles were bought.

During 1918 five Central Stores bicycles were struck off strength as past use and replaced, and no additional machines were bought ; but twenty-four additional machines were bought for the Provincial Offices, Department of Public Health, in 1918.

Tabular statement of bicycles establishment in Cairo at end of the following three years respectively :—

	1916	1917	1918
Scavenging and Watering Service..	61	67	67
Central Stores	53	53	53
TOTAL	114	120	120

Average cost of repairs per bicycle per annum was :—

1916		1917		1918	
L.E.	M.	L.E.	M.	L.E.	M.
5	094	4	483	3	487

Buildings.—No extension of stabling took place in 1918, but a credit of L.E. 1,400 was granted in Scavenging and Watering Service budget, 1918–1919, for construction of a masonry stable at Shûbra, on Government land, ceded to the Scavenging and Watering Service.

The work is to be executed by the Ministry of Public Works, but had not been put in hand up to the end of 1918.

The Abu el Ela stable belonging to this Service was still retained in 1918 by the Army, and, in consequence stabling accommodation for the Service remained limited.

Municipal Supplies Service.—The credit for this work (L.E. 5,000) was not increased, and the work continued as in the previous year.

Drainage Transport Service.—There has been extension of this in 1918 of two carts, mules and harness.

Daily-paid Labour.—Statistics are as follows :—

	1916	1917	1918
Drivers :—			
Water Cart	120	141	167
Dust Cart	349	356	359
Sweepers	595	610	618
Miscellaneous	82	58	58
TOTAL	1,146	1,165	1,202

Work for Army Account.—This continued as in 1917, refuse being removed from the same offices in Cairo against payment, the Army loaning a pair of mules, which were fed and maintained by the Service.

Shoeing.—Average cost per set per month :—

1916		1917		1918	
L.E.	M.	L.E.	M.	L.E.	M.
0	087	0	102	0	116

The increase of cost was due to increased cost of iron and coal.

Destructor.—Annual upkeep, inclusive of screen, was :—

1916		1917		1918	
L.E.	M.	L.E.	M.	L.E.	M.
1	247	1	257	1	486

Average cost per day, inclusive of non-working periods, was :—

1916		1917		1918	
L.E.	M.	L.E.	M.	L.E.	M.
3	417	3	445	4	070

Upkeep of Taps.—The following was the expenditure under this head :—

1916	1917	1918
L.E.	L.E.	L.E.
395	499	500

The increase in 1917 and 1918 was due to the increased cost of material.

X.—GENERAL.

1.—BUDGET.

The Budget for the year April 1, 1918, to March 31, 1919, was fixed at ...	L.E.	527,205
That for 1917 was fixed at	,,	456,233
Showing an increase of	,,	70,972

TABLE LXII.—TWO YEARS' COMPARATIVE BUDGETS.

	1918	1917	Increase.	Decrease.
	L.E.	L.E.	L.E.	L.E.
CHAPTER I.—CENTRAL SERVICES, INSPECTORATES, HOSPITALS, ETC.				
Art. 1. Salaries, wages, and allowances...	199,447	183,399	16,048	—
„ 2. Transport, transfer and travelling allowances	15,779	13,789	1,990	—
„ 3. Food	70,265	33,353	36,912	—
„ 4. Forage	1,244	936	308	—
„ 5. Rent, water, light, and disposal of sewage	18,944	17,838	1,106	—
„ 6. Books and periodicals	407	406	1	—
„ 7. Telephones and telegrams	1,485	1,445	40	—
„ 8. Petty expenses... ..	2,402	2,302	100	—
„ 9. Purchase of animals	1,270	904	366	—
„ 10. Free water fountains	3,000	3,000	—	—
„ 11. Stores... ..	102,802	95,968	6,834	—
„ 12. Uniforms	766	929	—	163
„ 13. Upkeep of material and equipment	4,326	4,030	296	—
„ 14. Upkeep of motor cars, etc.	2,769	926	1,843	—
„ 15. Supplies to Provincial Councils ...	650	3,200	—	2,550
„ 16. Allowances to sanitary barbers ...	485	485	—	—
„ 17. Upkeep of buildings	5,928	5,928	—	—
„ 18. Alterations to buildings... ..	800	800	—	—
„ 19. Disinfecting ships at the ports ...	6,000	6,000	—	—
„ 20. Transport of stores	2,100	2,100	—	—
„ 21. Maintenance of temporary lazarets at Gabbari... ..	4,560	4,560	—	—
„ 22. Experimental work at the Institutes	300	300	—	—
„ 23. Purchase of motor cars	780	725	55	—
„ 24. Sanitary improvements in mosques	2,500	2,500	—	—
„ 25. New works	17,001	15,462	1,539	—
Total of Chapter I	466,010	401,285	67,438	2,713

TABLE LXII—(continued).

	1918	1917	Increase.	Decrease.
	L.E.	L.E.	L.E.	L.E.
Total of Chapter I	466,010	401,285	67,438	2,713
CHAPTER II.—SCAVENGING AND WATERING SERVICE.				
Art. 26. Salaries, wages, and allowances ...	28,310	27,708	602	—
„ 27. Uniforms	487	396	91	—
„ 28. Forage and shoeing... ..	12,528	12,114	414	—
„ 29. Water	6,060	5,972	88	—
„ 30. Lighting and disposal of sewage ...	100	100	—	—
„ 31. Upkeep and repairs to plant and material	2,270	2,270	—	—
„ 32. Material	9,848	7,430	2,418	—
„ 33. Stores, etc., sold to Municipalities Local Commissions and Provincial Councils	5,000	3,000	2,000	—
„ 34. Telephones and telegrams	60	60	—	—
„ 35. Petty expenses... ..	100	100	—	—
„ 36. Purchase of animals	1,073	1,073	—	—
„ 37. Upkeep of gullies	1,705	1,705	—	—
Total of Chapter II	67,541	61,928	5,613	—
To deduct :	533,551	463,213	73,051	2,713
Recoveries of services rendered	6,346	6,980	634	—
TOTAL	†527,205	*456,233	73,685	2,713
Net increase	—	—	70,972	

* Original grant	L.E.	459,866
Add :—	L.E.	
By transfer from the Ports and Ligths	248	
„ „ Mecca and Medina Caravan	20	
Cost of services rendered carried to receipts instead of being deducted from expenditure	3,224	3,492
To deduct :—		
By transfer to the Main Drainage Department	1,539	
„ „ Mechanical Department	262	
„ „ Ministry of Finance	1,922	
„ „ Frontier Districts Administration	3,302	
„ „ Ministry of Agriculture	100	7,125
		456,233

† Further provision for the cost of services rendered to this Department has been made in the budgets of the following Departments :—

	1918	1917
	L.E.	L.E.
Ministry of Finance (Stationery Office)	Mémoire.	1,540
„ „ (Post Office)	2,168	1,971
„ „ (Customs)	550	550
Provinces and Governorates (Police)... ..	237	228
Pensions	13,607	12,476
	16,562	16,765

NEW WORKS.

	1918	Expended.
	L.E.	L.E.
Purchase of new hot water boiler and 2 new washing machines at Qasr el 'Aini Hospital	270	50
Equipment for the Suez Hospital Laboratory	50	30
Vaccine Institute equipment	100	—
Hygienic Institute accommodation	250	—
Initial cost of scavenging and watering new roads	603	53
Prophylactic measures against cholera (including L.E. 6,566 for serum) ...	10,338	8,897
Damanhûr Hospital, electric light installation	250	—
Qasr el 'Aini Hospital, repairs and construction of footpaths	1,500	—
Masonry stables at Shubra (S. and W.S.)	1,400	—
Extension for Central Laboratories	1,250	—
Electric light installation (Benha Infectious Hospital) ..	60	—
Retaining wall (Minya Infectious Hospital)	200	—
Completion of the electric lighting of Alexandria Hospital	580	—
Providing accommodation for Sisters, Mansûra Hospital	150	—
Equipment, Shibîn el Kôm Hospital	—	6
Statistics, employees	—	138
TOTAL	17,001	9,174

2.—STAFF.

TABLE LXIII.—PERMANENT EMPLOYEES.

CATEGORY.	1918	1917	CATEGORY.	1918	1917
Technical.			<i>Brought forward</i> ...	339	324
Director-General... ..	1	1	Chief Inspector of Pharmacies ...	1	1
Assistant Director-General... ..	1	1	Asst. Chief Inspector of Pharmacies	2	2
Directors of Sections	4	4	Pharmacist, 2nd class	1	—
President, Medical Commission ...	—	1	Pharmacists, 3rd „	5	4
Inspector, Cairo City	1	1	„ 4th „	14	15
Special Class Inspector	3	2	Assistant Pharmacists	7	5
Sub-Director of Section	3	3	Sanitary Engineer, 1st class ...	—	1
Vice-President Medical Commission...	—	1	„ „ 2nd „	1	1
Divisional Inspector, 1st class ...	3	7	„ „ 3rd „	2	2
Divisional Inspectors	3	—	Chief Inspector, Scavenging and		
Inspectress	1	1	Watering Service	1	1
Inspector	1	—	Inspector, Scavenging and Watering		
Inspector, 2nd class	19	6	Service	1	1
„ 3rd „	7	19	Sub-Inspector, Scavenging and Wa-		
Director of Technical Institutes... ..	1	1	tering Service	1	1
Sub-Director of Institutes	1	—	Inspector	1	1
Director Antirabic Institute	1	—			
Bacteriologist, 1st class	—	1	Clerical.		
Bacteriologists, 2nd „	3	2	Director of Service	1	—
„ 3rd „	2	2	„ „ „	1	2
„ 4th „	8	6	Sub-Directors of Service	2	2
Chemists, 2nd class	2	2	Chefs de Bureau... ..	2	2
„ 3rd „	2	2	Sous-Chefs de Bureau	8	4
„ 4th „	3	2	Employees, 1st class	10	10
Director, Alexandria Hospital	1	1	„ 2nd „	20	18
„ Fever Hospital	1	—	„ 3rd „	46	38
Sub-Director of Hospital	—	1	„ 4th „	128	130
Medical Officer, 1st class... ..	1	1	Chief Storekeeper	—	—
„ „ 2nd „	3	3	Storekeeper, 1st class	1	1
„ „ 3rd „	9	8	Storekeepers, 2nd „	2	2
„ „ 4th „ ...Cat. A... ..	22	22	„ 3rd „	7	3
„ „ 4th „ ... „ B... ..	186	178	„ 4th „	28	11
Midwives	44	44			
Director of Stores	1	1			
Assistant Director of Stores	1	—			
<i>Carried forward</i> ...	339	324	TOTAL	632	582

TEMPORARY EMPLOYEES.

CATEGORY.	1917	1918	CATEGORY.	1917	1918
			<i>Brought forward</i> ...	278	326
Medical Officers	45	52	Mechanic	1	1
Inspectors (Epidemics)	4	4	Meter inspector	1	1
Inspector, Provincial Clerks	1	1	Stable masters	2	2
Engineers	6	6	Director, Antirabic Institute	1	—
Matrons	3	4	Storekeepers	19	4
Nursing Sisters	25	25	Midwives	3	8
Clerks	192	232	Superintendent	—	1
Works foremen	2	2			
<i>Carried forward</i> ...	278	326	<i>TOTAL</i>	305	343

HORS CADRE STAFF ENGAGED IN 1918.

CATEGORY.	1917	1918	CATEGORY.	1917	1918
			<i>Brought forward</i> ...	551	593
Chief attendants	79	80	Disinfectors, 2nd class	30	31
Male „	314	348	Cooks	47	45
Female „	126	131	Printers	3	3
Assistants, Laboratory, 1st class ...	—	1	Overseers	31	35
„ „ 2nd „ ...	5	5	Moawens	23	34
„ „ 3rd „ ...	6	7	Sanitary Barbers	16	15
„ „ 4th „ ...	9	9	Mechanics	1	2
Disinfectors, 1st class	12	12	Various categories	932	915
<i>Carried forward</i> ...	551	593	<i>TOTAL</i>	1,634	1,673

3.—AUTHORIZATIONS TO PRACTISE THE MEDICAL
AND ALLIED PROFESSIONS.

TABLE LXIV.

PROFESSION.	NATIONALITY.															
	British.		Egyptians.		Americans.		Italians.		Russians.		Greeks.		Ottomans.		TOTAL.	
	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917	1918	1917
Medical	1	1	48	48	1	—	—	—	1	—	1	1	—	1	52	51
Pharmaceutical :—																
(1) Pharmacist ...	—	—	4	9	—	—	1	—	—	—	2	1	—	1	7	11
(2) Assistant Pharmacists ...	—	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—
Veterinary	—	—	11	7	—	—	—	—	—	—	—	—	—	—	11	7
Midwifery	—	1	10	7	—	—	1	1	—	2	—	1	—	—	11	12
Dental	1	1	1	1	1	—	—	—	—	—	—	—	—	—	3	2
<i>TOTALS</i> ...	2	3	76	72	2	—	2	1	1	2	3	3	—	2	86	83

4.—LEGAL.

The following enactments bearing on the work of the Department were promulgated in 1918 :—

(1) *Arrêté* of January 29, 1918, modifying the list of *Etablissements Incommodes, Insalubres et Dangereux*, Class III, Category B, *re* sale and depots of domestic fowl and game of all sorts.

(2) Law No. 3 of 1918. Enacting new prophylactic measures against cholera.

(3) Law No. 15 of 1918. Modifying Article 5 of Law No. 20, 1911. Authorizing *aides-pharmaciens* to keep their terms in a pharmacy managed by one qualified pharmacist instead of two as required by the Law of 1911, etc.

A table showing the number of prosecutions, etc., in connection with Public Health Laws is annexed.

TABLE LXV.—CONTRAVENTIONS AGAINST PUBLIC HEALTH LAWS.

NAME OF LAW.	Cairo.	Port Said.	Suez.	Ismailia.	Damietta.	Qalyūbiya.	Minūfiya.	Gharbiya.	Dagahliya.	Sharqia.	Behaira.	Giza.	Beni Suef.	Fayūm.	Minia.	Asyūt.	Girga.	Qena.	Aswān.	TOTAL. 1918.	TOTAL 1917
<i>Vidange</i> and <i>dépotoirs</i> . <i>Arrêté</i> of November 8, 1886, modified by <i>Arrêté</i> of June 2, 1910	520	165	3	—	1	10	—	110	48	1	12	1	—	—	—	—	—	—	—	871	624
Practice of medicine and its Branches. <i>Arrêté</i> of June 13, 1891... ..	21	3	1	—	2	9	12	13	5	3	1	3	2	1	5	1	—	3	—	85	123
Vaccination. Decree of December 17, 1890, modified by Decree of August 6, 1897, and by Law No. 9, 1917 ...	213	7	1	3	3	27	86	220	109	94	152	30	66	76	50	58	111	135	25	1,466	1,835
Enclosure of waste lands. <i>Arrêté</i> of June 15, 1893 ...	1	—	—	—	—	—	1	—	1	1	—	—	—	—	4	1	1	—	—	10	26
CEMETERIES :—																					— 88 —
Inhumation, exhumation, and transport of bodies abroad. Regulations of September 15, 1876, and March 26 and October 30, 1877	3	—	—	—	—	—	—	—	2	1	—	2	—	1	4	—	14	—	—	27	38
Transfer of cemeteries. Decree of January 29, 1894	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	3	2
Enclosure of cemeteries : unauthorized inhumation. Decree of March 12, 1898	—	—	—	—	—	—	—	5	2	9	4	9	12	—	—	—	1	—	—	42	77
PROPHYLACTIC MEASURES :—																					
Permanent and exceptional measures to prevent epidemics. <i>Arrêts</i> of May 11, 1895, and December 19, 1904	—	—	16	—	—	—	—	13	—	—	—	—	—	20	—	—	—	—	—	49	10
Oysters and shell-fish during epidemics. <i>Arrêté</i> of June 16, 1912	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera. <i>Arrêté</i> of October 17, 1895, and supplementary <i>Arrêté</i> of May 30, 1896	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	1,009	—	—	1,012	—
Plague and cholera. Decree of May 27, 1899, modified by Laws No. 3 of February 16, 1911, and No. 10 of April 27, 1913	—	—	—	19	—	—	—	—	—	—	—	—	—	—	25	1	—	—	130	175	58
Disinfection of houses during epidemics. <i>Arrêts</i> of May 23 and June 26, 1901	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Passenger control in case of cholera abroad. <i>Arrêté</i> of January 21, 1911, Law No. 3 of February 1918	270	130	3	3	18	232	475	479	276	379	146	435	292	355	485	305	102	566	189	5,140	9

[illegible]

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